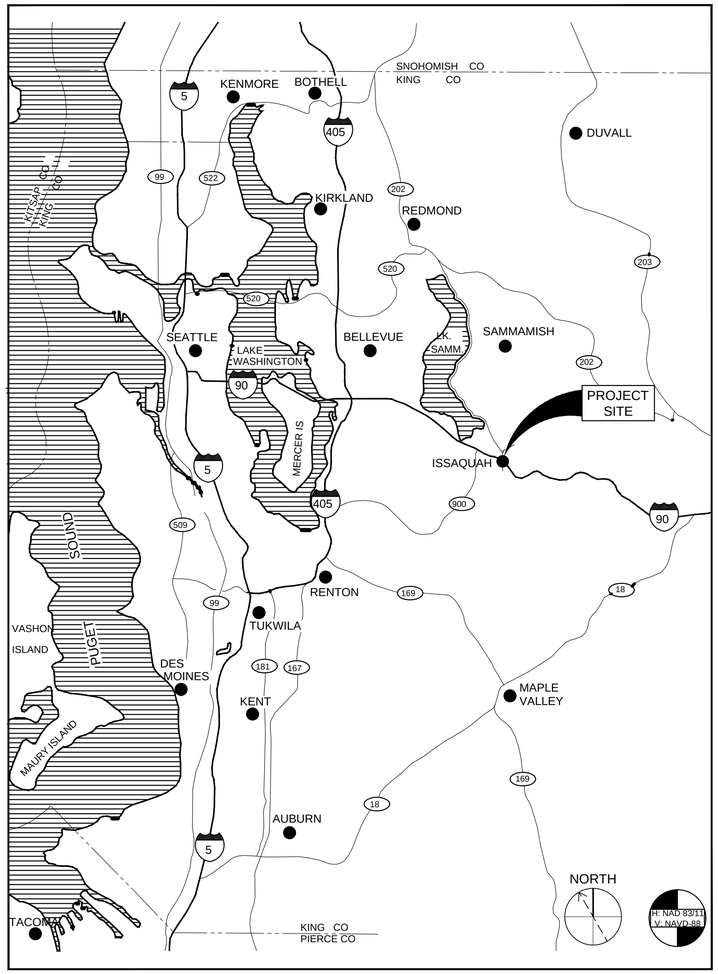
Sammamish Plateau Water

WELL 9 PFAS TREATMENT FACILITY

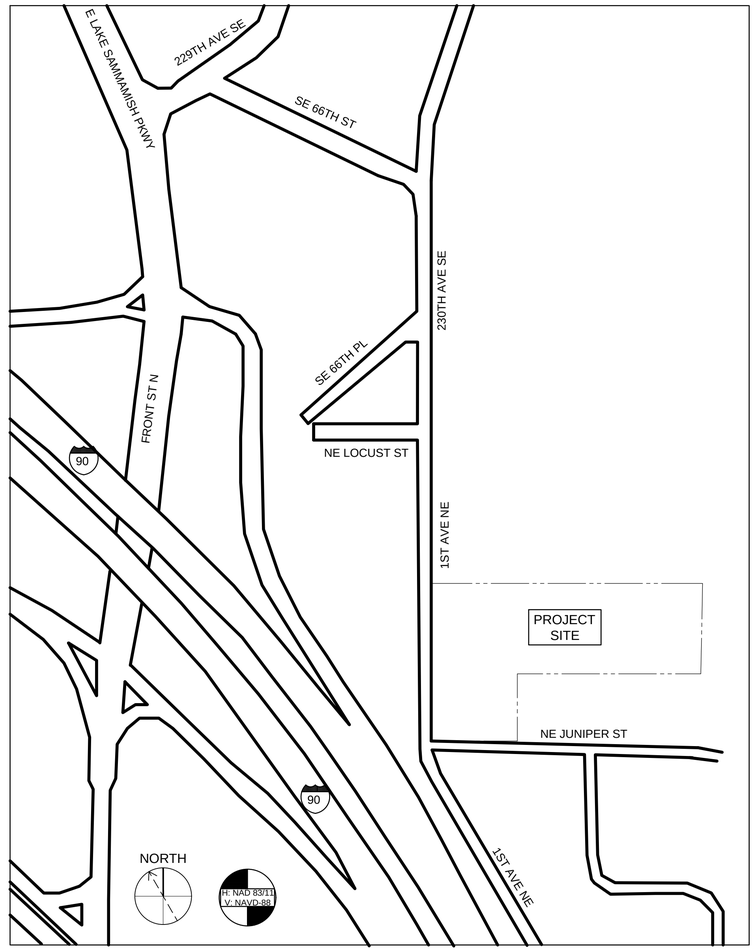
PROJECT NO. c20005

90% DESIGN PACKAGE
DECEMBER 2020

VOLUME 3 OF 3
DRAWINGS



VICINITY MAP
SCALE: NTS



LOCATION MAP
SCALE: NTS

Brown AND Caldwell

WAGNER ARCHITECTS ··PLANNERS

SAMMAMISH PLATEAU WATER & SEWER DISTRICT
APPROVED FOR CONSTRUCTION

GENERAL MANAGER _____ DATE _____

DRAWING LIST		
SHEET NUMBER	DRAWING NUMBER	DRAWING TITLE
GENERAL		
1	G-00-0001	COVER SHEET
2	G-00-0002	DRAWING INDEX
3	G-00-1001	GENERAL NOTES AND SYMBOLS
4	G-00-2001	ABBREVIATIONS
5	G-00-5001	PROCESS FLOW DIAGRAM
6	G-00-7001	DESIGN CRITERIA SUMMARY
CIVIL		
7	C-00-0001	CIVIL LEGEND AND GENERAL NOTES
8	C-00-1001	EXISTING SITE PLAN
9	C-00-2001	SITE PLAN
10	C-00-2002	TESC PLAN
11	C-00-4001	UTILITY PLAN
12	C-00-6001	RAW PIPE PLAN AND PROFILE
13	C-00-6002	GTW PIPE PLAN AND PROFILE
14	C-00-6003	BWW PIPE PLAN AND PROFILE
15	C-00-8001	TESC DETAILS
16	C-00-8002	PIPING CONNECTIONS DETAIL
17	C-00-8003	CHEMICAL INJECTION VAULT DETAIL
18	C-00-8004	SPW STANDARD DETAILS 1
19	C-00-8005	SPW STANDARD DETAILS 2
20	C-00-8006	INFILTRATION POND SECTIONS AND DETAILS
21	C-00-8007	CIVIL DETAILS 1
22	C-00-8011	PIPE CONNECTION AND TESTING SEQUENCE 1
23	C-00-8012	PIPE CONNECTION AND TESTING SEQUENCE 2
24	C-20-8001	BACKWASH WATER FLOW CONTROL VAULT DETAIL
ARCHITECTURAL		
25	A-20-1001	GAC BUILDING FLOOR PLAN
26	A-20-1002	GAC BUILDING ROOF PLAN
27	A-20-3001	GAC BUILDING BATHROOM PLAN, ELEVATIONS AND WALL TYPES
28	A-20-4001	GAC BUILDING SECTIONS AND INTERIOR ELEVATIONS
29	A-20-4002	GAC BUILDING EXTERIOR ELEVATIONS
30	A-20-4003	GAC BUILDING WALL SECTIONS
31	A-20-7001	GAC BUILDING SCHEDULES
32	A-20-8001	GAC BUILDING WALL DETAILS
33	A-20-8002	GAC BUILDING ROOF DETAILS
34	A-20-8003	GAC BUILDING ROOF DETAILS
35	A-20-8004	GAC BUILDING DOOR DETAILS
STRUCTURAL		
36	S-20-0001	STRUCTURAL GENERAL NOTES 1
37	S-20-0002	STRUCTURAL GENERAL NOTES 2
38	S-20-0003	SPECIAL INSPECTION 1
39	S-20-0004	SPECIAL INSPECTION 2
40	S-20-1001	GAC BUILDING FOUNDATION PLAN
41	S-20-1002	GAC BUILDING ROOF FRAMING PLAN
42	S-20-1003	SPENT BACKWASH TANK FOUNDATION PLAN
43	S-20-3001	GAC BUILDING CROSS SECTIONS
44	S-20-3002	GAC BUILDING LONGITUDINAL SECTIONS
45	S-20-3003	SPENT BACKWASH TANK SECTIONS AND DETAILS
46	S-20-3004	GAC BUILDING FOUNDATION SECTIONS AND DETAILS 1
47	S-20-3005	GAC BUILDING FOUNDATION SECTIONS AND DETAILS 2
48	S-20-8001	STRUCTURAL STANDARD DETAILS 1
49	S-20-8002	STRUCTURAL STANDARD DETAILS 2

PROCESS		
50	D-00-0001	PROCESS PIPING STANDARD SYMBOLS
51	D-00-8001	CHEMICAL INJECTION VAULT DETAIL
52	D-11-1001	WELL 9 CHEMICAL ROOM PLAN
53	D-11-4001	CAUSTIC SODA PIPING DETAILS
54	D-12-3001	BRINE TANK PIPING SECTION
55	D-12-4001	FLUORIDE RELOCATION AND BRINE PIPE DETAILS
56	D-20-1001	GAC BUILDING OVERALL PLAN
57	D-20-1002	SPENT BACKWASH TANK OVERALL PLAN
58	D-20-3001	GAC TREATMENT SECTION 1
59	D-20-3002	GAC TREATMENT SECTION 2
60	D-20-3003	GAC TREATMENT SECTION 3
61	D-20-3004	GAC TREATMENT DETAILS
62	D-20-3005	SPENT BACKWASH TANK SECTIONS
63	D-20-8001	STANDARD DETAILS AND PIPE PENETRATIONS
64	D-20-8002	PIPE SUPPORT STANDARD DETAILS 1
65	D-20-8003	PIPE SUPPORT STANDARD DETAILS 2
66	D-20-9001	GAC TREATMENT ISOMETRIC VIEW 1
67	D-20-9002	GAC TREATMENT ISOMETRIC VIEW 2
68	DD-11-1001	DEMOLITION PLAN FOR WELL 9 CHEMICAL ROOM
PLUMBING		
69	P-20-0001	PLUMBING LEGEND AND GENERAL NOTES
70	P-20-1001	GAC BUILDING PLUMBING FLOOR PLAN
71	P-20-3001	GAC BUILDING PLUMBING PARTIAL PLANS AND SECTIONS
72	P-20-3002	PLUMBING DETAILS 1
73	P-20-3003	PLUMBING DETAILS 2
74	P-20-5001	PLUMBING DIAGRAMS
MECHANICAL/HVAC		
75	M-20-0001	HVAC LEGENDS AND GENERAL NOTES
76	M-20-1001	GAC BUILDING HVAC FLOOR PLAN
77	M-20-3001	HVAC SECTIONS
78	M-20-3002	HVAC DETAILS
79	M-20-5001	AIRFLOW DIAGRAM
80	M-20-7001	MECHANICAL SCHEDULES
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81	E-00-0001	LEGENDS AND SYMBOLS 1
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83	E-00-0003	ABBREVIATIONS AND GENERAL NOTES
84	E-00-1001	SITE PLAN
85	E-10-7001	WELL 9 BUILDING LOADS AND SCHEDULE
86	E-11-1001	WELL 9 CHEMICAL ROOM PLAN
87	E-20-1001	GAC BUILDING POWER AND CONTROL PLAN 1
88	E-20-1002	GAC BUILDING POWER AND CONTROL PLAN 2
89	E-20-1003	SPENT BACKWASH TANK
90	E-20-3001	GAC BUILDING LIGHTING, RECEPTACLE AND GROUNDING PLAN 1
91	E-20-3002	GAC BUILDING LIGHTING, RECEPTACLE AND GROUNDING PLAN 2
92	E-20-4001	MCC AND ELECTRICAL EQUIPMENT ELEVATIONS 1
93	E-20-4002	MCC AND ELECTRICAL EQUIPMENT ELEVATIONS 2
94	E-20-4003	MCC AND ELECTRICAL EQUIPMENT ELEVATIONS 3
95	E-20-5001	GAC BUILDING ONE-LINE DIAGRAM
96	E-20-7001	GAC BUILDING PANEL SCHEDULES
97	E-20-7002	GAC BUILDING CIRCUIT SCHEDULES 1
98	E-20-7003	GAC BUILDING CIRCUIT SCHEDULES 2
99	E-20-8001	ELECTRICAL DETAILS 1
100	E-20-8002	ELECTRICAL DETAILS 2

101	ED-11-1001	DEMOLITION PLAN FOR WELL 9 CHEMICAL ROOM
INSTRUMENTATION		
102	I-00-0001	LEGENDS AND SYMBOLS 1
103	I-00-0002	LEGENDS AND SYMBOLS 2
104	I-00-0003	LEGENDS AND SYMBOLS 3
105	I-00-0004	ABBREVIATIONS AND GENERAL NOTES
106	I-12-1001	P&ID - BRINE TANK
107	I-20-1001	NOT USED
108	I-20-1002	P&ID - GAC VESSELS 1 AND 2
109	I-20-1003	P&ID - GAC VESSELS 3 AND 4
110	I-20-1004	P&ID - GAC VESSELS 5 AND 6
111	I-20-1005	P&ID - GAC VESSELS 7 AND 8
112	I-20-1006	P&ID - SPENT BACKWASH TANK
113	I-20-1007	P&ID - GRINDER PUMP
114	I-20-1008	P&ID - INSTRUMENT AIR
115	I-00-3001	NETWORK BLOCK DIAGRAM
116	I-12-3001	WELL 9 BUILDING LOOP DIAGRAM 1
117	I-20-3001	GAC BUILDING PANEL LAYOUT DRAWING
118	I-20-3002	GAC BUILDING LOOP DIAGRAM 1
119	I-20-3003	GAC BUILDING LOOP DIAGRAM 2

Brown AND Caldwell

90% DESIGN

Sammamish Plateau Water

Sammamish Plateau Water PFAS Project

REVISIONS

REV	DATE	DESCRIPTION

LINE IS 2 INCHES AT FULL SIZE

DESIGNED: J.STULTZ
DRAWN: M.GISSE
CHECKED:
CHECKED:
APPROVED:

FILENAME
G-00-0002.dwg
BC PROJECT NUMBER
155452
CLIENT PROJECT NUMBER

GENERAL

DRAWING INDEX

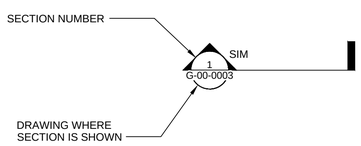
DRAWING NUMBER
G-00-0002
SHEET NUMBER
OF

CROSS REFERENCING SYSTEM

1. PLAN TITLES:

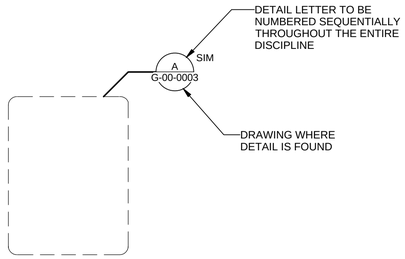
PLAN TITLE
SCALE: 1/8" = 1'-0"

2. SECTION CUTS:



3. DETAIL CALLOUT:

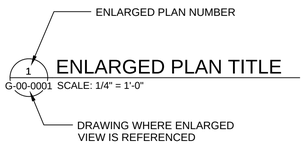
A. BY CALLOUT:



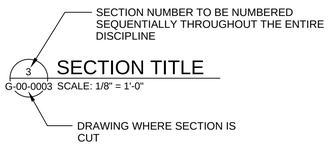
B. BY NOTE: "SEE DETAIL B/D-00-8001"

B IS DETAIL REFERENCE LETTER
D-00-8001 IS DRAWING WHERE DETAIL IS SHOWN

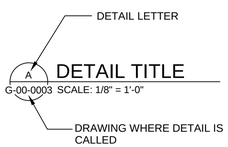
4. ENLARGED PLAN TITLES:



5. SECTIONS TITLES:

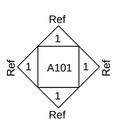


6. DETAIL TITLES:



7. ELEVATION CALLOUT:

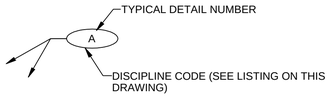
ELEVATION - EXTERIOR



ELEVATION - INTERIOR

CROSS REFERENCING SYSTEM (CONTINUED)

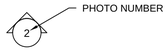
8. TYPICAL DETAIL REFERENCE:



9. TYPICAL DETAIL TITLES:

10. KEYNOTES:

10. PHOTO CALLOUT:



MISCELLANEOUS

ROOM NAME

101

ROOM NAME AND NUMBER

LOCATION
EL. XXXX.XX

ELEVATION CALL OUT IN SECTION

℄ EL. XXXX.XX

PIPE CENTRLINE ELEVATION CALL OUT IN SECTION

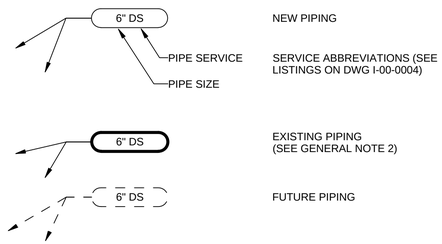
101 DOOR TAG

1i CEILING TAG

1f FIXTURE TAG

1i WALL TAG

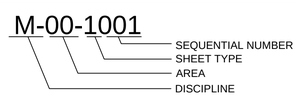
PIPING IDENTIFICATION SYSTEM



GENERAL NOTES

1. THE NOTE IN THE TITLE BLOCK OF THIS DRAWING WHICH READS "LINE IS 2 INCHES AT FULL SCALE" APPEARS ON DRAWINGS FOR IDENTIFICATION OF SCALE DISTORTIONS ON HALF SIZE DRAWINGS AND DRAWING REPRODUCTIONS. IT SHALL MEAN THAT THE DRAWING IS FULL SIZE AND THE DRAWING SCALES ACCURATE WHEN THE LENGTH OF THIS LINE IS TWO INCHES. IF THE LENGTH IS OTHER THAN TWO INCHES, DRAWING SCALES MUST BE ADJUSTED ACCORDINGLY.
2. EXISTING PIPING IS DESIGNATED BY SERVICE RATHER THAN MATERIAL TYPE. MATERIAL TYPES, IF KNOWN, APPEAR OUTSIDE THE PIPING CALLOUT BUBBLE, AND MAY NOT BE THE SAME MATERIAL TYPES SPECIFIED FOR NEW PIPING.
3. ABBREVIATIONS USED IN THIS CONTRACT DOCUMENT CONFORM TO ANSI Y1.1, UNLESS NOTED OTHERWISE ON DRAWINGS.
4. ALL STANDARD DETAILS APPLY TO ALL THE CONTRACTORS WORK WHETHER SPECIFICALLY REFERENCED OR NOT.
5. SEE EACH DISCIPLINE'S FRONT END SHEETS FOR EACH DISCIPLINES STANDARD SYMBOLS, ETC.
6. SEE ADDITIONAL GENERAL NOTES THROUGHOUT DRAWING SET.

DRAWING NUMBERING SYSTEM



AREA
- 00 GENERAL AND SITE PLANS
- 10 EXISTING BUILDING
- 11 CAUSTIC SYSTEM
- 12 BRINE SYSTEM
- 20 GAC TREATMENT FACILITY

DISCIPLINES
- G GENERAL
- C CIVIL
- A ARCHITECUTRAL
- S STRUCTURAL
- D PROCESS
- DD PROCESS DEMOLITION
- P PLUMBING
- M MECHANICAL/HVAC
- E ELECTRICAL
- ED ELECTRICAL DEMOLITION
- I INSTRUMENTATION

SHEET TYPE	GENERAL	CIVIL	STRUCTURAL/ ARCHITECTURAL	PROCESS MECHANICAL/PLUMBING/ BUILDING MECHANICAL	ELECTRICAL	INSTRUMENTATION
0	COVER SHEET, LEGENDS AND ABBREVIATIONS	LEGENDS AND ABBREVIATIONS	LEGENDS AND ABBREVIATIONS	LEGENDS AND ABBREVIATIONS	LEGENDS AND ABBREVIATIONS	LEGENDS AND ABBREVIATIONS
1	USER DEFINED	EXISTING CONDITIONS	PLANS	PLANS	POWER AND CONTROL PLANS	P&IDS
2	USER DEFINED	SITE PLANS/CONSTRUCTION FACILITIES AND TEMPORARY EROSION AND SEDIMENT CONTROL PLANS	ENLARGED PLANS	ENLARGED PLANS	INSTRUMENT LOCATION PLANS	PANEL LAYOUTS
3	USER DEFINED	GRADING AND PAVING PLANS	SECTIONS AND DETAILS	SECTIONS AND DETAILS	LIGHTING AND RECEPTACLE PLANS	NETWORK DRAWINGS
4	USER DEFINED	YARD PIPING AND UTILITY PLANS	ELEVATIONS	EQUIPMENT DRAWINGS (PLANS, ELEVATIONS, NOZZLE ORIENTATION, SPECIFIC DETAILS RELATED TO PIECES OF EQUIPMENT)	EQUIPMENT DRAWINGS (PLANS, ELEVATIONS, ORIENTATION, SPECIFIC TO PIECES OF EQUIPMENT	USER DEFINED
5	USER DEFINED	ROADWAY PLAN AND PROFILES	USER DEFINED	DIAGRAMS	DIAGRAMS	USER DEFINED
6	USER DEFINED	PIPELINE PLAN AND PROFILES	USER DEFINED	USER DEFINED	USER DEFINED	USER DEFINED
7	SCHEDULES	SCHEDULES	SCHEDULES	SCHEDULES	SCHEDULES	SCHEDULES
8	USER DEFINED	TYPICAL DETAILS	TYPICAL DETAILS	TYPICAL DETAILS	TYPICAL DETAILS	TYPICAL DETAILS
9	USER DEFINED	USER DEFINED (FOR TYPES THAT DO NOT FALL IN OTHER CATEGORIES)	3D REPRESENTATIONS (ISOMETRICS, PERSPECTIVES)	3D REPRESENTATIONS (ISOMETRICS, PERSPECTIVES)	3D REPRESENTATIONS (ISOMETRICS, PERSPECTIVES)	USER DEFINED

Brown AND Caldwell

90% DESIGN

Sammamish Plateau Water

Sammamish Plateau Water PFAS Project

REVISIONS

REV	DATE	DESCRIPTION

LINE IS 2 INCHES AT FULL SIZE

DESIGNED:
DRAWN: M.GISSE
CHECKED:
CHECKED:
APPROVED:

FILENAME
G-00-1001.dwg
BC PROJECT NUMBER
155452
CLIENT PROJECT NUMBER

GENERAL

GENERAL NOTES AND SYMBOLS

DRAWING NUMBER
G-00-1001
SHEET NUMBER
OF

ABBREVIATIONS

A	
A/C	AIR CONDITIONING
A	AMPERE
AA	ATOMIC ABSORPTION UNIT
AB	ANCHOR BOLT, AGGREGATE BASE
AC	ASPHALT CONCRETE, ALTERNATING CURRENT, AIR CONDITIONER
ACOU	ACOUSTIC
ADD	ADDITION(AL)
ADPT	ADAPTER
AFD	ARC FLASH SENSING DEVICE
AFF	ABOVE FINISHED FLOOR
AGGR	AGGREGATE
AIC	AMPS INTERRUPTING CURRENT
AL	ALUMINUM
ALM	ALARM
ALT	ALTERNATE
AMB	AMBIENT
AMD	AIR MONITORING DEVICE
ANC	ANCHOR
APPROX	APPROXIMATE(LY)
AR	ALARM RELAY, AIR RETURN
ARCH	ARCHITECTURAL
AS	AIR SUPPLY
ASPH	ASPHALT
ASSY	ASSEMBLY
ASYM	ASYMMETRICAL
ATM	ATMOSPHERE
AUTO	AUTOMATIC
AUX	AUXILIARY
AVE	AVENUE
AVG	AVERAGE
AWG	AMERICAN WIRE GAUGE

B	
BBE	BEVEL BOTH ENDS
BC	BEGINNING OF CURVE, BARE COPPER
BCR	BEGINNING OF CURVE RETURN
BD	BOARD
BE	BOILER EXHAUST
BF	BLIND FLANGE
BFV	BUTTERFLY VALVE
BHP	BRAKE HORSEPOWER
BLDG	BUILDING
BLE	BEVEL LARGE END
BLK	BLOCK
BLS	BALLAST
BMK	BENCHMARK
BO	BLOW OFF
BOL	BOLLARD
BOP	BOTTOM OF PIPE, BACK OF PIPE
BOT	BOTTOM
BRDG	BRIDGING
BRG	BEARING
BRK	BREAK
BRZ	BRONZE
BTM	BOTTOM
BTU	BRITISH THERMAL UNIT
BV	BALL VALVE
BVC	BEGINNING OF VERTICAL CURVE
BWS	BACKWASH SUPPLY
BWW	BACKWASH WASH WATER

C	
C	CONDUIT
CAF	COMBUSTION AIR FAN
CAP	CAPACITY
CARV	COMBINATION AIR RELEASE VALVE
CB	CATCH BASIN
CC	COOLING COIL
C-C	CENTER TO CENTER
CCP	CONCRETE CYLINDER PIPE
CCSP	CONCRETE LINED AND COATED STEEL PIPE
CD	CEILING DIFFUSER, CHEMICAL DRAIN
CDT	CONDULET
CED	CEILING EXHAUST DIFFUSER
CER	CEILING EXHAUST REGISTER
CF	CUBIC FEET
CFH	CUBIC FEET PER HOUR
CFM	CUBIC FEET PER MINUTE
CFR	CODE OF FEDERAL REGULATIONS
CFS	CUBIC FEET PER SECOND
CH	CHANNEL
CHW	COLD WATER
CI	CAST IRON
CIP	CAST IRON PIPE, CAST IN PLACE
CIRC	CIRCUMFERENCE
CJ	CONSTRUCTION JOINT
CKPL	CHECKER PLATE
CKT	CIRCUIT
CKV	CHECK VALVE
C/L	CENTERLINE
CL	CLEARANCE,CLEAR, CONDENSATE-LOW PRESSURE
CLG	CEILING
CLK	CLOCK
CLR	CLEAR
CLSM	CONTROLLED LOW-STRENGTH MATERIAL
CM	CENTIMETERS, CONDENSATE-MEDIUM PRESSURE
CML	CEMENT MORTAR LINED
CMP	CORRUGATED METAL PIPE
CMU	CONCRETE MASONRY UNIT
CO	CLEANOUT, CONDUIT ONLY
COF	COOLING AIR
COL	COLUMN
COM	COMMINUTOR, COMPACTOR
CONC	CONCRETE
COND	CONDUCTIVITY, CONDENSATE, CONDUCTOR
CONN	CONNECTION
CONST	CONSTRUCTION
CONT	CONTINUED(OUS)
CP	CONCRETE PIPE, CENTER POINT
CPLG	COUPLING
CPVC	CHLORINATED POLYVINYL CHLORIDE
CR	CARD READER
CREJ	CORRUGATED RUBBER EXPANSION JOINT
CS	CIRCULATED SLUDGE
CSD	CEILING SUPPLY DIFFUSER
CSP	CORRUGATED STEEL PIPE
CT	CURRENT TRANSFORMER
CTR	CONTRACTOR, CENTER
CTRL	CONTROL
CU	CONTROL UNIT, COPPER, CUBIC
CULV	CULVERT
C/W	COMPLETE WITH
CWA	CONCRETE WASHOUT AREA
CY	CUBIC YARD

D	
D	DRAIN, DEGREE, DEEP
DC	DIRECT CURRENT
DE	DENSITY METER
DEC	DECREASING
DEMO	DEMOLISH
DET	DETAIL
DFD	DUCT FIRE DAMPER
DG	DIGESTER GAS
DI	DUCTILE IRON PIPE
DIA	DIAMETER
DIAG	DIAGRAM
DIF	DIFFUSER
DIFF	DIFFERENTIAL
DIR	DIRECTION
DISCH	DISCHARGE
DN	DOWN
DR	DRAIN ROCK, DRAINAGE, DRIVE
DRG	DEGRATING
DT	DOUBLE TEE, DRAIN TRAP, DRIP TRAP
DWG	DRAWING
DWLS	DOWELS

E	
E	EAST, EMERGENCY
EA	EXHAUST AIR, EACH
EAT	ENTERING AIR TEMPERATURE
EC	END OF CURVE, EVAPORATIVE COOLER, EMPTY CONDUIT
ECC	ECCENTRIC
ECO	ECOLOGY
ED	EXTRACTOR DAMPER, EQUIPMENT DRAIN
EE	EACH END
EF	EACH FACE
EFF	EFFLUENT
EJ	EXPANSION JOINT
EL	ELEVATION
ELEC	ELECTRICAL
ELL	ELBOW
EMBD	EMBEDDED
EP	EDGE OF PAVEMENT, ELECTRIC/PNEUMATIC CONVERTER
EPDM	ETHYLENE PROPYLENE DIENE MONOMER
EPS	EXPANDED POLYSTYRENE
EQ	EQUAL
EQUIP	EQUIPMENT
EQUIV	EQUIVALENT
ES	EXISTING SURFACE, ELECTRICAL SERVICE
ESMT	EASEMENT
ETM	ELAPSED TIME METER
EVC	END OF VERTICAL CURVE
EW	EACH WAY
EW T&B	EACH WAY TOP AND BOTTOM
EWEF	EACH WAY EACH FACE
EX	EXTRA
EXG	EXHAUST GRILLE
EXIST	EXISTING
EXP	EXPANSION
EXT	EXTERIOR

F	
F	FAHRENHEIT, FACE
FAB	FABRICATE(D)(TION)
FAI	FRESH AIR INTAKE
FB	FLAT BAR, FLOOR BEAM
FC	FAIL CLOSED
FCA	FLANGED COUPLING ADAPTER
FCO	FLOOR CLEANOUT
FCR	FINE CRUSHED ROCK
FD	FLOOR DRAIN, FIRE DAMPER, FOUNDATION DRAIN
FDC	FLEXIBLE DUCT CONNECTOR / FIRE DEPARTMENT CONNECTION
FEXT	FIRE EXTINGUISHER
FF	FAR FACE, FINISH FLOOR, FLAT FACE
F-F	FACE TO FACE
FG	FINISH GRADE
FH	FIRE HYDRANT, FLAT, FLUORESCENT
FHD	FLATHEAD
FIN	FINISHED, FINISH
FL	FLOW LINE, FLANGE, FAIL LAST
FLA	FULL LOAD AMPS
FLC	FLOCCULATOR
FLEX	FLEXIBLE
FLG	FLANGE(D)
FLP	FLUID POWER UNIT
FLR	FLOOR
FM	FORCE MAIN
FMH	FLEXIBLE METAL HOSE
FMSS	FORCEMAIN SANITARY SEWAGE
FND	FOUNDATION
FO	FAIL OPEN, FIBER OPTIC
FOB	FLAT ON BOTTOM
FOT	FLAT ON TOP
FP	FIRE PROTECTION
FPC	FLEXIBLE PIPE COUPLING
FPM	FEET PER MINUTE
FPS	FEET PER SECOND
FR	FRAME
FRP	FIBERGLASS REINFORCED PIPE
FRS	FREEZESTAT
FRWP	FIBERGLASS REINFORCED WALL PANEL
FS	FAR SIDE
FT	FEET
FTG	FOOTING
FURRG	FURRING
FTGS	FITTINGS
FUT	FUTURE

G	
G	GUTTER ELEVATION
GA	GAGE, GAUGE
GAC	GRANULAR ACTIVATED CARBON
GAL	GALLON
GALV	GALVANIZED
GB	GRADE BREAK
GD	GUARD
GEC	GROUND ELECTRODE CONDUCTOR
GEN	GENERAL
GF	GROUND FAULT
GFEP	GROUND FAULT EQUIPMENT PROTECTION
GFI	GROUND FAULT INTERRUPTER
GI	GALVANIZED IRON
GL	GLASS
GLDI	GLASS LINED DUCTILE IRON
GND	GROUND
GPD	GALLONS PER DAY
GPM	GALLONS PER MINUTE
GRD	GRADE
GRS	GALVANIZED RIGID STEEL
GRT	GROUT
GRTG	GRATING
GSKT	GASKET
GSP	GALVANIZED STEEL PLATE
GTW	GAC TREATED WATER
GV	GATE VALVE
GWB	GYPSUM WALLBOARD
GWT	GROUND WATER TABLE
GYP	GYPSUM

H	
H	HIGH
H/A	HAND AUTO
HC	HEATING COIL, HANDICAP
HD	HEAVY DUTY
HDOT	HEAVY DUTY OILTIGHT
HDG	HOT-DIPPED GALVANIZED
HDPE	HIGH DENSITY POLYETHYLENE
HDR	HEADER
HDWR	HARDWARE
HG	MERCURY, HIGH GRADE
HGT	HEIGHT
HH	HAND HOLE
HHW	HOT WATER
HID	HIGH INTENSITY DISCHARGE
HM	HOLLOW METAL
HOA	HAND-OFF-AUTO
HOR	HORIZONTAL
HP	HIGH PRESSURE, HIGH POINT, HORSEPOWER
HPA	HIGH PRESSURE AIR
HPEL	HIGHPOINT ELEVATION
HPS	HIGH PRESSURE SODIUM
HR	HANDRAIL, HEAT RESERVOIR, HOUR
HTV	HIGH TEMPERATURE VENT
HV	HOSE VALVE, HEATING AND VENTILATING UNIT, HIGH VOLTAGE
HVAC	HEATING, VENTILATING, AND AIR CONDITIONING
HWTR	HIGH WATER
HYD	HYDRAULIC
HYDT	HYDRANT
HZ	HERTZ

I	
	INTEGRAL CONTROL
IA	INSTRUMENT AIR
ID	INSIDE DIAMETER
IE	INVERT ELEVATION
IF	INSIDE FACE
IL	INDICATING LAMP. INSTRUMENT LOOP, INTAKE LOUVER
IMC	INTERMEDIATE METAL CONDUIT
IN	INCH
INCAND	INCANDESCENT
INF	INFLUENT
INS	INSULATE(D)(ION)
INST	INSTANTANEOUS
INSTR	INSTRUMENTATION
INT	INTERIOR, INTERSECTION
INTER	INTERMEDIATE
INTLK	INTERLOCK
INV	INVERT
I/O	INPUT/OUTPUT
IRRIG	IRRIGATION
IT	INSTRUMENT TAP

J	
JCT	JUNCTION
JST	JOIST
JT	JOINT

K	
K	KIP (1000 POUNDS)
KCMIL	1000 CIRCULAR MIL
KO	KNOCK OUT
KSF	KIPS PER SQUARE FOOF
KSI	KIPS PER SQUARE INCH
KV	KILOVOLT
KVA	KILOVOLT AMPERE
KVAR	KLIOVAR
KW	KILOWATT
KWH	KILOWATT HOUR

L	
L	LENGTH
LAM	LAMINATED
LAT	LEAVING AIR TEMPERATURE, LATERAL, LATITUDE
LB	POUND
LC	LIGHTING CONTACTOR
LED	LIGHT EMITTING DIODE
LEV	LEVEL
LF	LIGHT FIXTURE, LINEAR FEET
LFBR	LINEAR FEET BASEBOARD
LG	LONG
LJ	LAP JOINT
LLV	LONG LEG VERTICAL
LO	LUBRICATING OIL
LOS	LOCKOUT STOP
LP	LOW PRESSURE, LOW POINT
LSIG	LONG TIME, SHORT TIME, INSTANTANEOUS, GROUND FAULT
LT	LONG TIME
LTG	LIGHTING
LPEL	LOW POINT ELEVATION
LWR	LOWER

M	
MA	MILLIAMPERE
MAINT	MAINTENANCE
MAL	MALLEABLE
MAN	MANUAL(LY)
MAT	MATERIAL
MAX	MAXIMUM
MBH	MILLION BTU'S PER HOUR
MCM	THOUSAND CIRCULAR MILLS
MD	MOTORIZED DAMPER
MECH	MECHANICAL
MFR	MANUFACTURE(R)
MG	MILLION GALLONS
MG/L	MILLIGRAMS PER LITER
MGR	MANAGER
MH	MANHOLE
MHHW	MEAN HIGH HIGH WATER
MI	MALLEABLE IRON
MIN	MINIMUM, MINUTE
MISC	MISCELLANEOUS
MJ	MECHANICAL JOINT
ML	MILLILITER
MLT	MAN LIFT
MLLW	MEAN LOWER LOW WATER
MLW	MEAN LOW WATER
MM	MILLIMETER
MO	MASONRY OPENING, MOTOR OPERATOR
MOD	MODULUS
MON	MONUMENT
MPC	MINI POWER CENTER
MPH	MILES PER HOUSE
MTL	METAL
MUL/DIV	MULTIPLY/DIVIDE
MV	MEDIUM VOLTAGE, MILLIVOLT, MUD VALVE
MW	MONITORING WELL

N	
N	NEUTRAL, NORTH
NA	NONAUTOMATIC, NOT APPLICABLE
NaOH	SODIUM HYDROXIDE
NC	NORMALLY CLOSED
NE	NORTHEAST
NEG	NEGATIVE
NF	NONFUSED
NG	NATURAL GAS
NIC	NOT IN CONTRACT
NO	NORMALLY OPEN, NUMBER
NOM	NOMINAL
NO	NAMEPLATE
NPSH	NET POSITIVE SUCTION HEAD
NPT	NATIONAL PIPE THREAD
NRS	NONRISING STEM
NS	NEAR SIDE
NTS	NOT TO SCALE
NU	NOT USED
NW	NORTHWEST

O	
OA	OUTSIDE AIR, OVERALL
OAI	OUTSIDE AIR INTAKE
OB	OPPOSED BLADE
OC	ON CENTER
OD	OUTSIDE DIAMETER
OF	OUTSIDE FACE, OVERFLOW
OH	OVERHEAD
OIS	OPERATOR INTERFACE STATION
OL	OVERLOAD
O/O	OUT TO OUT
OPNG	OPENING
OPP	OPPOSITE
OSA	OUTSIDE AIR
OT	OIL TIGHT
OUT	OUTLET
OWS	OPERATOR WORKSTATION

P	
P	PROCESS, POLE
P&ID	PROCESS AND INSTRUMENTATION DIAGRAM
PAR	PARALLEL, PARAGRAPH
PB	PUSHBUTTON
PBE	PLAIN BOTH ENDS
PC	PLAIN CONCRETE, PIPE COUPLING, PRECAST
PCHV	PINCH VALVE
PCP	PLAIN CONCRETE PIPE
PCS	PIECES
PC-T	PIPE COUPLING TO TAKE TENSION
PD	PUMPED DRAINAGE
P/E	PNEUMATIC/ELECTRICAL CONVERTER
PE	PRIMARY EFFLUENT, PLAIN END
PEMB	PRE-ENGINEERED METAL BUILDING
PEN	PENETRATION
PERC	PERCOLATION
PERF	PERFORATED
PF	POWER FACTOR, PRESSURIZED FLOW
PG	PRESSURE GAGE
PH	PHASE
PI	POINT OF INTERSECTION
PIVC	POINT OF INTERSECTION ON VERTICAL CURVE
PJF	PREMOLDED JOINT FILLER
PK	PEAK
PL	PROPERTY LINE, PIPELINE, PLATE
PLAM	PLASTIC LAMINATE
PLCS	PLACES
PLE	PLAIN LARGE END
PLY	PLYWOOD
PNE	PNEUMATIC CONVEYANCE
PO4	PHOSPHATE
POC	POINT OF CURVE, POINT OF CONNECTION
POE	PLAIN ONE END
POP	PNEUMATIC OPERATOR
PP	POWER POLE
PR	PAIR
PRD	PRESSURE RELIEF DAMPER
PRES	PRESSURE
PRI	PRIMARY
PRS	PRESSURE REDUCING STATION
PSE	PLAIN SMALL END
PSF	POUNDS PER SQUARE FOOT
PSI	POUNDS PER SQUARE INCH
PSIA	POUNDS PER SQUARE INCH ABSOLUTE
PSIG	POUNDS PER SQUARE INCH GAGE
PSL	PIPE SLEEVE
PT	POTENTIAL TRANSFORMER, PAINT
PV	PLUG VALVE, PROCESS VARIABLE
PVC	POLYVINYL CHLORIDE
PVI	POINT OF VERTICAL INTERSECTION
PVL	PRESSURE VESSEL
PVT	PAVEMENT
PW	POTABLE WATER
PWR	POWER

Q	
Q	RATE OF FLOW
QCPLG	QUICK COUPLING

R	
R	RADIUS, RISER
R/C	REINFORCED CONCRETE
RA	RETURN AIR
RAD	RADIUS
RAF	ROLL TYPE AIR FILTER
RAW	RAW WATER
RCDR	RECORDER
RCP	REINFORCED CONCRETE PIPE
RD	ROOF DRAIN, ROAD
RDWY	ROADWAY
REC	RECESSED
RECD	RECEIVED
RECIRC	RECIRCULATION
RED	REDUCE(R)
REF	REFERENCE
REINF	REINFORCE, REINFORCING
REM	REMOVE, REMOVABLE
REQ'D	REQUIRED
RES	RESISTOR
RESIL	RESILIENT
RE-STL	REINFORCING STEEL
REV	REVISED(ION)
RF	RAISED FACE
RG	RETURN GRILLE
RGS	RIGID GALVANIZED STEEL
RJ	RESTRAINED JOINT
RL	REDUCED LEVEL
RM	ROOM
RMS	ROOT MEAN SQUARE
RND	ROUND
RO	ROUGH OPENINGS
RP	REDUCED PRESSURE BACKFLOW PREVENTER, RADIUS POINT
RPM	REVOLUTIONS PER MINUTE
RT	RIGHT
RTD	RESISTANCE TEMPERATURE DETECTOR
RTP	REINFORCED THERMOSET POLYESTER
RTRP	REINFORCED THERMOSET PLASTIC
RTU	REMOTE TERMINAL UNIT
R/W	RIGHT OF WAY
RWL	RAINWATER LEADER
RWP	RAINWATER PIPE
RVSS	REDUCED VOLTAGE SOLID STATE STARTER

S	
S	SOUTH
SA	SERVICE AIR
SB	SIGNAL BOX
SCD	SCUPPER DRAIN
SCF	STANDARD CUBIC FEET PER MINUTE
SCH	SCHEDULE
SCR'D	SCREWED
SD	STORM DRAIN, SPLITTER DAMPER, SMOKE DETECTOR
SECT	SECTION
SF	SQUARE FOOT,
SFW	SOFTENED WATER
SGS	SCREENINGS
SHT	SHEET
SI	SPEED INCREASER
SIM	SIMILAR
SL	SLOPE
SM	SURFACE MOUNTED
SOL	SOCKOLET
SP	SPACE, SET POINT, STATIC PRESSURE
SO	SLIP-ON
SO2	SULFUR DIOXIDE
SPCS	SPACES
SPEC	SPECIFICATION(S)
SPG	SPACING
SPL	SPLICE
SPTG	SEPTAGE
SQ	SQUARE
SR	SPEED REDUCER
SRG	SPLIT-RANGING
SRT	SOLIDS RETENTION TIME
SRV	SAFETY RELIEF VALVE
SS	SANITARY SEWER, SPEED SELECTRO, SUSPENDED SOLIDS, SECONDARY SLUDGE
SSK	SERVICE SINK
SST	STAINLESS STEEL
STA	STATION, STARTING AIR
STD	STANDARD, STORM DRAIN
STIFF	STIFFENER
STL	STEEL
STOR	STORAGE
STP	SHIELDED TWISTED PAIR
STRG	STRONG
STRUCT	STRUCTURE
SUBST	SUBSTITUTE
SUPT	SUPPORT
SURF	SURFACE
SW	SOUTHWEST, SOCKETWELD, SEAL WATER
SYM	SYMMETRICAL
SYS	SYSTEM

T	
T	TRAP, TOP, TANGENT, TREAD, TELEPHONE
T & B	TOP AND BOTTOM
T/B	TOP OF BANK
T/C	TOP OF CURB
TCL	TOTALLY CLOSED
TCP	TEMPERATURE CONTROL PANEL
TD	TANK DRAIN, TEMPERATURE DIFFERENCE, TIME DELAY RELAY
TE	TOTALLY ENCLOSED, THICKENER EFFLUENT
TEMP	TEMPERED, TEMPORARY
TESC	TEMPORARY EROSION AND SEDIMENT CONTROL
TFR	THERMAL FLUID RETURN
TFS	THERMAL FLUID SUPPLY
TH	THERMOSTAT
THRD	THREADED
THRESH	THRESHOLD
THRU	THROUGH
TLE	THREAD LARGE END
TMR	TIMER
TO	TOP OF
TOA	TEST-OFF-AUTO
TOC	TOP OF CONCRETE (CURB)
TOE	THREADED ONE END
TOG	TOP OF GRATING
TOL	THREDOLET
TOP	TOP OF POP
TOS	TOP OF STEEL
TOW	TOP OF WALL
TP	TANGENT POINT
TPD	TONS PER DAY
TPG	TOPPING
TPLX	TRIPLEXED
TR	STAIR TREAD, TIMING RELAY
TRANS	TRANSFER
TRI	TRIAD
TS	TEMPERATURE SWITCH, TUBE STEEL, TOTAL SOLIDS
TSE	THREADED SMALL END
TSS	TOTAL SUSPENDED SOLIDS
TTE	TOTE
TVS	TRANSIENT VOLTAGE SURGE SUPPESSOR
TYP	TYPICAL

U	
UBX	UTILITY BOX
UG	UNDER GROUND
UH	UNIT HEADER
UL	ULTIMATE LOAD
UN	UNION
UON	UNLESS OTHERWISE NOTED
UP	UTILITY POLE
U/S	UNDERSIDE
US	UTILITY STATION
UTIL	UTILITIES

V	
V	VOLT, VENT, VERTICAL, VAULT
VA	VOLTAMPERE
VAC	VACUUM, VOLTS ALTERNATING CURRENT
VAR	VARIES, VARIABLE
VB	VERTICAL BEND
VBX	VALVE BOX
VC	VERTICAL CURVE, CHEMICAL VENT, VACUUM CONTACTOR
VCP	VENDOR CONTROL PANEL
VD	VOLUME DAMPER
VDC	VOLTS DIRECT CURRENT
VERT	VERTICAL
VFT	VACUUM FILTER
VLT	VAULT
VND	VENDOR
VP	VAPOR PRESSURE, VACUUM PUMP, PETROLEUM VENT
VPI	VERTICAL POINT OF INTERSECTION
VSC	VARIABLE SPEED COUPLING
VTC	VEHICLE TRACKING CONTROL
VTR	VENT THROUGH ROOF
VV	VARIABLE VOLUME BOX

W	
W	WIDTH, WEST, WOMENS, WATER, WASTE, WATT, WIRE
W/	WITH
W/O	WITHOUT
WAS	WASTE ACTIVATED SLUDGE
WC	WATER COLUMN
WCO	WALL CLEANOUT
WD	WOOD
WE	WATER ELEVATION
WEG	WALL EXHAUST GRILLE
WER	WALL EXHAUST REGISTER
WF	WIDE FLANGE
WG	WATER GAGE, WITH GROUND
WI	WROUGHT IRON
WL	WATER LINE
WM	WATER METER, WATER MAIN
WN	WELD NECK
WOL	WELDOLET
WP	WORKING POINT, WEATHERPROOF
WPJ	WEAKENED PLANE JOINT
WR	WASHROOM
WS	WATER SURFACE, WATER STOP
WSP	WELDED STEEL PIPE
WSR	WALL SUPPLY REGISTER, WASHER
WSTP	WATERSTOP
WT	WATERTIGHT, WEIGHT
WTR	WATER
WW	WIREWAY
WWF	WELDED WIRE FABRIC, WET WEATHER FLOW

Y	
YCO	YARD CLEANOUT
YR	YEAR

Z	
Z	IMPEDANCE
ZS	POSITION SWITCH

Brown AND Caldwell

90% DESIGN

Sammamish Plateau Water

Sammamish Plateau Water PFAS Project

REVISIONS

REV	DATE	DESCRIPTION

LINE IS 2 INCHES AT FULL SIZE

DESIGNED:
DRAWN:
CHECKED:
CHECKED:
APPROVED:

FILENAME
G-00-2001.dwg

BC PROJECT NUMBER
155452

CLIENT PROJECT NUMBER

GENERAL

ABBREVIATIONS

DRAWING NUMBER
G-00-2001

SHEET NUMBER
OF

DESIGN CRITERIA SUMMARY			
PROCESS	DESIGN CRITERIA	UNIT	VALUE
GENERAL	PEAK FLOW RATE (WELL 8[a])	gpm	3,200
	MINIMUM FLOW RATE (WELL 7[a])	gpm	2,100
GAC TREATMENT SYSTEM	NUMBER OF CONTACTORS	--	8 (FOUR PAIR OF LEAD-LAG CONTACTORS)
	MAXIMUM UNIT HYDRAULIC LOADING RATE[b]	gpm/sf	9.4
	MINIMUM EMPTY BED CONTACT TIME (EBCT[b])	min	19
	MASS OF GAC PER CONTACTOR	lb/vessel	40,000
	GAC CONTACTOR DIAMETER	ft	12
	CONTACTOR MATERIAL	--	CARBON STRUCTURAL STEEL
SPENT BACKWASH TANK	TYPE	--	AWWA D103 FACTORY COATED BOLTED STEEL TANK FOR WATER STORAGE
	VOLUME	gal	80,000
	DIAMETER (ID)	ft	25 ft
	SIDE WATER DEPTH	ft	25 ft
CAUSTIC TANKS	NUMBER OF TANKS	--	2
	TYPE	--	HIGH DENSITY CROSSLINKED POLYETHLENE
	VOLUME	gal	5,100 (EACH)
	DIAMETER (D)	ft	10
	HEIGHT	ft	11
BRINE TANK	TYPE	--	FIBERGLASS REINFORCED PLASTIC (FRP)
	SALT CAPACITY	--	24-TON
	BRINE VOLUME	gal	3,760
	VOLUME (NOMINAL)	gal	5,900
	DIAMETER (D)	ft	10
	HEIGHT	ft	11

a. THE EXISTING WELL 9 CORROSION CONTROL FACILITY PROVIDES WATER TREATMENT FOR GROUNDWATER PRODUCED FROM THREE WELLS, WELLS 7, 8 AND 9. EACH WELL PUMP IS SIZED TO MEET A SPECIFIC WATER RIGHT, THEREFORE THE DISTRICT ONLY OPERATES ONE WELL AT A TIME. THEREFORE, THE PEAK FLOW IS BASED ON THE PUMP WITH THE MAXIMUM FLOW (3,200 gpm), AND THE MINIMUM FLOW IS THE CAPACITY OF THE PUMP WITH THE LOWEST FLOW (WELL 7). WELL 9 WAS SIZED TO MEET ITS NON-ADDITIVE WATER RIGHT (2,300 gpm).

b. ASSUMES ONE PAIR OF VESSELS ARE OUT OF SERVICE FOR A BACKWASH. WITH FOUR PAIRS OF VESSELS IN SERVICE, MINIMUM EBCT IS 25 MINUTES AND MAXIMUM FILTRATION RATE IS 7.1 gpm/sf.

Brown AND Caldwell

90% DESIGN

Sammamish Plateau Water

Sammamish
Plateau Water
PFAS Project

REVISIONS

REV	DATE	DESCRIPTION

LINE IS 2 INCHES
AT FULL SIZE

DESIGNED: J.STULTZ
DRAWN: M.GISSE
CHECKED:
CHECKED:
APPROVED:

FILENAME
G-00-7001.dwg
BC PROJECT NUMBER
155452
CLIENT PROJECT NUMBER

GENERAL

DESIGN CRITERIA SUMMARY

DRAWING NUMBER
G-00-7001
SHEET NUMBER
OF

EXISTING LEGEND

- BOUNDARY LINE
- RIGHT-OF-WAY LINE
- CENTERLINE
- SIDE SEWER
- OVERHEAD POWER
- OVERHEAD COMMUNICATION LINE
- WATER LINE
- GAS LINE
- WOOD FENCE
- CHAIN LINK FENCE
- CONIFER TREE W/DRIPLINE
- DECIDUOUS TREE W/DRIPLINE
- REBAR AND CAP (AS NOTED)
- MAG NAIL & WASHER (AS NOTED)
- WATER METER
- FIRE DEPARTMENT CONNECTION
- POST INDICATOR VALVE
- WATER VALVE
- FIRE HYDRANT
- ELECTRIC METER
- GAS METER
- GAS VALVE
- SEWER MANHOLE
- POWER POLE W/LUMINAIRE
- POWER POLE
- SIGN
- TELECOMMUNICATIONS MANHOLE
- STORM DRAINAGE MANHOLE
- CATCH BASIN
- BOLLARD

TEMPORARY EROSION AND SEDIMENT CONTROL

1. THE TESC FACILITIES SHOWN ON THIS PLAN ARE THE MINIMUM REQUIREMENTS FOR ANTICIPATED SITE CONDITIONS (SEE "NOTE" BELOW). DURING THE CONSTRUCTION PERIOD, THESE TESC FACILITIES SHALL BE UPGRADED AS NEEDED FOR UNEXPECTED STORM EVENTS AND MODIFIED TO ACCOUNT FOR CHANGING SITE CONDITIONS (E.G., ADDITIONAL SUMP PUMPS, RELOCATION OF DITCHES OR SILT FENCES, ETC.).
2. THE IMPLEMENTATION OF THESE TESC PLANS AND THE CONSTRUCTION, MAINTENANCE, REPLACEMENT, AND UPGRADING OF THESE TESC FACILITIES IS THE RESPONSIBILITY OF THE CONTRACTOR UNTIL ALL CONSTRUCTION IS APPROVED.
3. PRIOR TO EXCAVATION, CLEARING LIMITS SHALL BE APPROVED BY THE CONSTRUCTION MANAGER. ONCE APPROVED, THE BOUNDARIES OF THE CLEARING LIMITS SHALL BE CLEARLY FLAGGED BY A CONTINUOUS LENGTH OF SURVEY TAPE (OR FENCING, IF REQUIRED) PRIOR TO CONSTRUCTION. DURING THE CONSTRUCTION PERIOD, NO DISTURBANCE BEYOND THE CLEARING LIMITS SHALL BE PERMITTED. THE CLEARING LIMITS SHALL BE MAINTAINED BY THE CONTRACTOR FOR THE DURATION OF CONSTRUCTION.
4. THE TESC FACILITIES SHOWN ON THE DRAWINGS MUST BE CONSTRUCTED PRIOR TO OR IN CONJUNCTION WITH ALL CLEARING AND GRADING SO AS TO ENSURE THAT THE TRANSPORT OF SEDIMENT TO SURFACE WATERS, DRAINAGE SYSTEMS, AND ADJACENT PROPERTIES IS MINIMIZED.
5. THE TESC FACILITIES SHALL BE INSPECTED DAILY BY THE CONTRACTOR AND MAINTAINED TO ENSURE CONTINUED PROPER FUNCTIONING. WRITTEN RECORDS SHALL BE KEPT OF WEEKLY REVIEWS OF THE TESC FACILITIES DURING THE WET SEASON (OCT. 1 TO APRIL 30) AND OF MONTHLY REVIEWS DURING THE DRY SEASON (MAY 1 TO SEPT. 30).
6. ANY AREAS OF EXPOSED SOILS, INCLUDING ROADWAY EMBANKMENTS, THAT WILL NOT BE DISTURBED FOR TWO DAYS DURING THE WET SEASON OR SEVEN DAYS DURING THE DRY SEASON SHALL BE IMMEDIATELY STABILIZED WITH THE APPROVED TESC METHODS (E.G., SEEDING, MULCHING, PLASTIC COVERING, ETC.).
7. ANY AREA NEEDING TESC MEASURES THAT DO NOT REQUIRE IMMEDIATE ATTENTION SHALL BE ADDRESSED WITHIN FIFTEEN (15) DAYS.
8. THE TESC FACILITIES ON INACTIVE SITES SHALL BE INSPECTED AND MAINTAINED A MINIMUM OF ONCE A MONTH OR WITHIN FORTY-EIGHT (48) HOURS FOLLOWING A STORM EVENT.
9. AT NO TIME SHALL MORE THAN ONE (1) FOOT OF SEDIMENT BE ALLOWED TO ACCUMULATE WITHIN A CATCH BASIN. ALL CATCH BASINS AND CONVEYANCE LINES SHALL BE CLEANED PRIOR TO PAVING. THE CLEANING OPERATION SHALL NOT FLUSH SEDIMENT-LADEN WATER INTO THE DOWNSTREAM SYSTEM.
10. STABILIZED CONSTRUCTION ENTRANCES AND ROADS SHALL BE INSTALLED AT THE BEGINNING OF CONSTRUCTION AND MAINTAINED FOR THE DURATION OF THE PROJECT. ADDITIONAL MEASURES, SUCH AS WASH PADS AND/OR STREET SWEEPING, MAY BE REQUIRED TO ENSURE THAT ALL PAVED AREAS ARE KEPT CLEAN FOR THE DURATION OF THE PROJECT.
11. WHERE STRAW MULCH FOR TEMPORARY EROSION CONTROL IS REQUIRED, IT SHALL BE APPLIED AT A MINIMUM THICKNESS OF 3 INCHES.
12. CONTRACTOR SHALL BE REQUIRED TO SUBMIT A TEMPORARY EROSION AND SEDIMENTATION CONTROL PLAN FOR THIS PROJECT TO THE TOWN FOR APPROVAL PRIOR TO ANY WORK. DETAILS SHOWN ON THIS SHEET SHALL BE A GUIDELINE IN PREPARATION OF SAID PLAN, BUT CURRENT BEST MANAGEMENT PRACTICES SHALL BE ULTIMATELY ADHERED TO IN PREPARATION OF SAID PLAN.

PROPOSED LEGEND

- PIPE < 12"
- PIPE > 12"
- BACKWASH WASTE LINE
- GAS LINE
- WATER LINE
- CLEARING LIMITS
- LIMITS OF DISTURBANCE
- AREA OF DEMOLISH
- GRAVEL SURFACE OVER EXISTING
- GRAVEL SURFACE
- STABILIZED CONSTRUCTION ENTRANCE

GENERAL NOTES

1. CONTRACTOR SHALL VERIFY LOCATION OF ALL EXISTING UTILITIES IN THE VICINITY OF WORK. CALL 811 48 HOURS BEFORE YOU DIG, . POTHOLE IN ADVANCE OF WORK AS NECESSARY.
2. CONTRACTOR SHALL NOTIFY THE DISTRICT A MINIMUM OF 72 HOURS (3 WORKING DAYS) IN ADVANCE OF ALL REQUESTS FOR STAKING, TESTING OR INSPECTIONS.
3. CONTRACTOR SHALL FURNISH SHOP DRAWINGS FOR APPROVAL WHERE REQUIRED BY THE DETAIL SPECIFICATIONS AND FOR VARIATION FROM THE APPROVED DRAWING.
4. CONTRACTOR SHALL INSTALL EQUIPMENT IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS AND DISTRICT SPECIFICATIONS.
5. CONTRACTOR TO FURNISH ALL MATERIALS EXCEPT AS NOTED.
6. ALL DUCTILE IRON PIPE SHALL BE CLASS 52.
7. CONTRACTOR SHALL INFORM DISTRICT TWO DAYS PRIOR TO CONNECTION TO EXISTING WATER MAINS AND SHALL ONLY PROCEED AFTER RECEIVING PERMISSION.
8. CUT-INS SHALL BE DIRECTLY SUPERVISED BY CONSTRUCTION MANAGER OR PERFORMED BY THE DISTRICT. CONTRACTOR SHALL FIELD VERIFY LOCATION, DEPTH AND COORDINATES OF CUT-IN LOCATION.
9. ALL LIVE TAPS SHALL BE DIRECTLY SUPERVISED BY CONSTRUCTION MANAGER. CONTRACTOR SHALL FIELD VERIFY LOCATION, DEPTH AND COORDINATES OF TAP LOCATION.
10. CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL EXISTING PIPE TYPES, JOINT TYPES, AND SIZES FOR COUPLINGS, CONNECTIONS AND LIVE TAPS.
11. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO HAVE A SET OF THESE APPROVED PLANS ON THE JOB SITE WHENEVER CONSTRUCTION IS IN PROGRESS. NO CHANGES ARE TO BE MADE WITHOUT PRIOR WRITTEN APPROVAL BY THE DISTRICT.
12. PARTS MUST BE ON-SITE AND INSPECTED BY THE DISTRICT OR CONSTRUCTION MANAGER PRIOR TO SCHEDULING ANY/ALL INSTALLATIONS.
13. WATER USES OTHER THAN THOSE SHOWN WILL BE EVALUATED BY THE DISTRICT FOR COMPLIANCE WITH BACKFLOW PREVENTION REQUIREMENTS.
14. WATER LINE SEPARATION SHALL BE 10' HORIZONTAL FROM SANITARY SEWER, 5' HORIZONTAL FROM ALL OTHER UTILITIES. WATER LINE SHALL HAVE AN 18" MINIMUM VERTICAL CLEARANCE ABOVE SANITARY SEWER CROSSINGS, 6" MINIMUM VERTICAL CLEARANCE FOR ALL OTHERS. WHERE NOT POSSIBLE SEWER SHALL BE DIP AND ENCASED IN CONCRETE OR IN A STEEL CASING PER DISTRICT STANDARDS. AT CROSSINGS, SEWER PIPE JOINTS SHALL NOT BE OVER WATER PIPE, BUT EQUIDISTANT USING MAXIMUM POSSIBLE LENGTH OF SEWER PIPE.
15. MAXIMUM ALLOWABLE DEFLECTION AT EACH JOINT FOR DUCTILE IRON PIPE SHALL NOT EXCEED 3°.
16. ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH APPLICABLE LOCAL, STATE AND FEDERAL LAWS. ALL WORK SHALL CONFORM TO THE TECHNICAL PROJECT SPECIFICATIONS, AND STANDARD DETAILS OF THE DISTRICT WHERE SPECIFIED.
22. CONTRACTOR SHALL BE RESPONSIBLE FOR INSTALLING AND MAINTAINING ALL TESC MEASURES FOR WORK AS SPECIFIED ON CONSTRUCTION SWPPP DRAWINGS, REQUIRED BY THE CONSTRUCTION MANAGER AND SPECIFIED IN GOVERNING SPECIFICATIONS.
23. CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING OPERATIONAL AND FUNCTIONING STORM SEWER LINES, POTABLE WATER LINES, POWER, TELEPHONE, CABLE TV AND ALL OTHER LINES IN THE WORK AREA.
24. CONTRACTOR SHALL MAINTAIN STORM DRAINAGE FLOWS DURING CONSTRUCTION AND DURING THE REPLACEMENT OR RESTORATION OF EXISTING STORM DRAINAGE FACILITIES AND SURFACE FEATURES.
25. RESTORE ALL PRIVATE AND PUBLIC PROPERTY AFFECTED BY THIS WORK TO A CONDITION EQUAL TO OR BETTER THAN EXISTED BEFORE COMMENCING CONSTRUCTION WORK UNLESS SPECIFICALLY EXEMPTED BY THE DRAWINGS. RESTORATION WORK INCLUDES, BUT IS NOT LIMITED TO, PAVEMENT, BASE, SUBGRADE, CONCRETE CURBS, THERMOPLASTIC TRAFFIC MARKINGS, SIDEWALKS, DRIVEWAY APRONS, STORM WATER PIPE, ETC. ALL RESTORATION WORK SHALL BE PER SPECIFICATIONS.
26. WHERE EXISTING IMPROVEMENTS ARE TO BE REPLACED, ALL MATERIALS REQUIRED TO COMPLETE WORK SHALL BE NEW AND OF SAME SIZE AND DIMENSION AS THAT OF THE EXISTING IMPROVEMENTS, UNLESS OTHERWISE NOTED.
27. IF NECESSARY, USE TEMPORARY SHEETING OR TRENCH BOXES TO MINIMIZE THE SIZE OF THE EXCAVATIONS TO PROTECT ADJACENT EXISTING ROADWAYS, UTILITIES AND OTHER FACILITIES.
28. CONTRACTOR IS RESPONSIBLE FOR TRAFFIC CONTROL PLANS. THE CONTRACTOR SHALL COMPLY WITH WSDOT STANDARD SPECIFICATIONS SECTION 1-07.23 AND WITH ALL PERMIT CONDITIONS.
38. REFER TO DISTRICT SPECIFICATIONS AND STANDARD DETAILS FOR ALL REMAINING NOTES AND DETAILS.
39. CONTRACTOR SHALL USE CDF MATERIAL TYPE O (WSDOT 2-09.3(1)E) BACKFILL AT ALL UTILITY CROSSINGS (A MINIMUM OF 4-FT BEYOND EXISTING UTILITY) AND WHEN COVER IS LESS THAN 30" (PER PRE-APPROVAL).
40. COMPACTION TESTING IS REQUIRED FOR BOTH BASE AND TOP COURSE LAYERS PRIOR TO PAVEMENT RESTORATION.

LEGAL DESCRIPTION

THE NORTH 70 FEET OF LOT 1, BLOCK 3 OF HERBERT S. UPPER'S FIRST ADDITION TO ISSAQUAH, RECORDED UNDER VOLUME 12 OF PLATS AT PAGE 13, RECORDS OF KING COUNTY WASHINGTON.

TAX PARCEL NO. 884350-0121

PARCEL A OF CITY OF ISSAQUAH LOT LINE ADJUSTMENT NO. PLN09-00046, RECORDED UNDER RECORDING NO. 20100112900006, RECORDS OF KING COUNTY WASHINGTON.

TAX PARCEL NO. 884350-0120

GENERAL SURVEY NOTES

1. HORIZONTAL DATUM: NAD 83/11 PER WSDOT THE BASIS OF BEARINGS FOR THIS SURVEY IS PER WSDOT. WSDOT MONUMENT ID NO. 4662 (IS1797) WAS HELD FOR POSITION AND A LINE BETWEEN SAID MONUMENT ID NO. 4662 (IS1797) AND WSDOT MONUMENT ID NO. 4653 (IS1788) WAS HELD FOR ROTATION. THE BEARING OF SAID LINE BEING, NORTH 02°40'11" WEST.
2. VERTICAL DATUM: NAVD 88 THE BASIS OF ELEVATIONS FOR THIS SURVEY IS PER WSDOT. WSDOT MONUMENT ID NO. 4662 (IS1797) WAS HELD FOR POSITION WITH AN ELEVATION OF 58.724' (NAVD88)
3. SITE BENCHMARK: MAG NAIL W/WASHER STAMPED "TRUE NORTH CONTROL" ON THE WEST EDGE OF PAVEMENT IN THE RIGHT-OF-WAY OF 1ST AVENUE N.E., ACROSS FROM THE ENTRANCE TO 940 1ST AVENUE N.E., ELEVATION = 80.35'
4. DATE OF SURVEY: AUGUST 12, 2020
5. EQUIPMENT USED: LEICA TS 12.
6. UTILITIES SHOWN HEREON WERE FROM PHYSICAL STRUCTURES, OR FROM SURFACE PAINT MARKINGS BY A LOCATOR SERVICE.
7. 1' CONTOUR INTERVAL.
8. TOTAL AREA OF PROPERTY: 100,799 SQ. FT. ±
9. THIS SURVEY WAS PERFORMED WITHOUT THE BENEFIT OF A TITLE REPORT AND DOES NOT PURPORT TO SHOW EASEMENTS OF RECORD.
10. SURVEY WAS REVISED TO CONFORM WITH DISTRICT KNOWLEDGE OF RECORD DRAWINGS.

GEOTECHNICAL BORING NOTES

1. FOR GEOTECHNICAL BORING INFORMATION REFER TO THE SPW PFAS GEOTECHNICAL ENGINEERING REPORT PREPARED BY SHANNON AND WILSON, XXXX, 2021.

Brown AND Caldwell

90% DESIGN

Sammamish Plateau Water

Sammamish Plateau Water PFAS Project

REVISIONS

REV	DATE	DESCRIPTION

LINE IS 2 INCHES AT FULL SIZE

DESIGNED: K.WEBER
DRAWN: K.TOLLE
CHECKED:
CHECKED:
APPROVED:

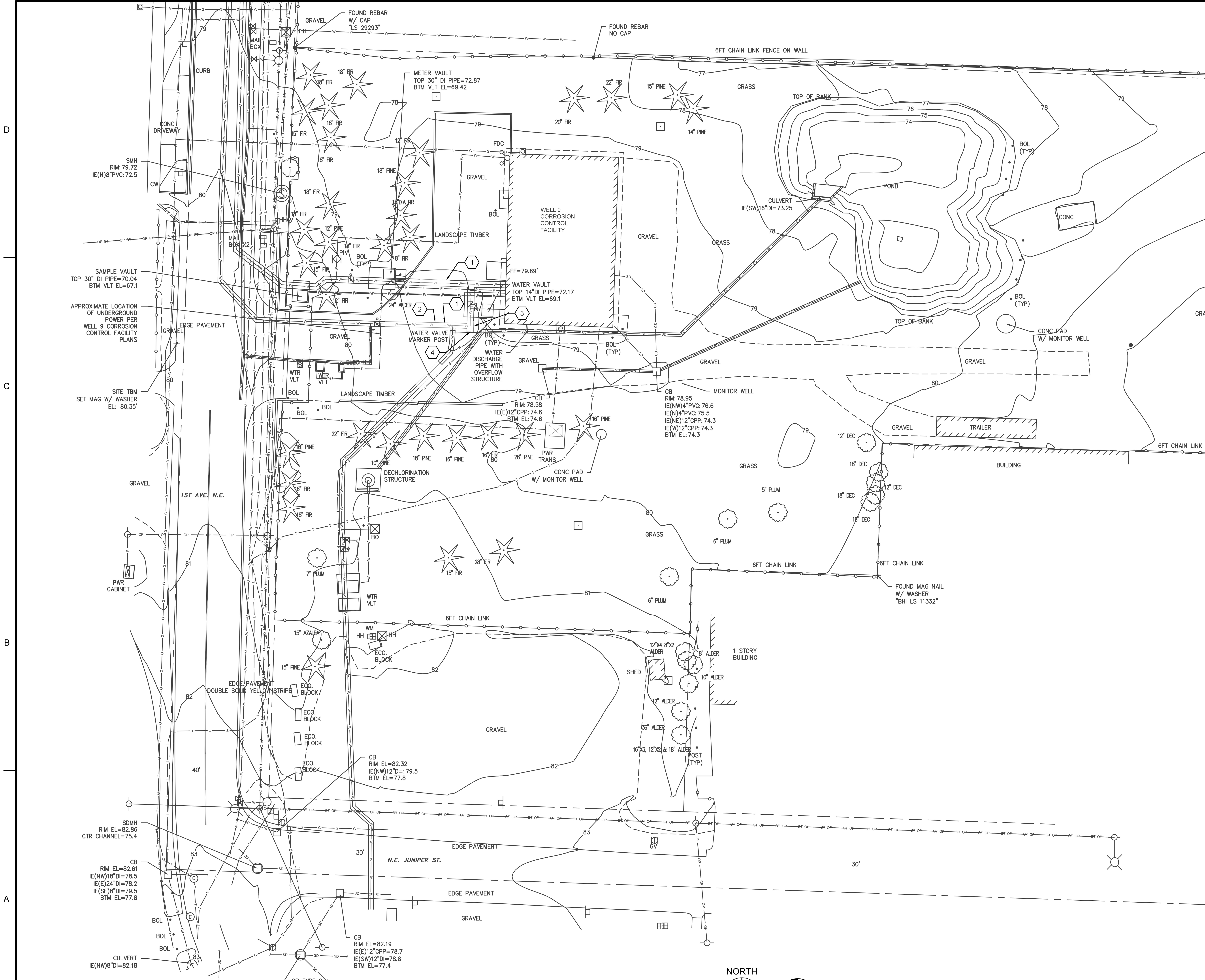
FILENAME C-00-0001.dwg
BC PROJECT NUMBER 155452
CLIENT PROJECT NUMBER

CIVIL

CIVIL LEGEND AND GENERAL NOTES

DRAWING NUMBER
C-00-0001

SHEET NUMBER
OF



EXISTING SITE
SCALE: 1" = 20'

GENERAL NOTES:

1. CONTRACTOR TO VERIFY EXISTING UTILITIES AT CONNECTION POINTS WITH NEW PIPING PRIOR TO ORDERING MATERIALS

KEY NOTES:

1. TWO EXISTING BALL AND SOCKET JOINTS.
2. POSSIBLE EXISTING MJ HARNESS AND RESTRAINT HARNESS. POSSIBLE MISALIGNMENT OF EXISTING PIPELINE, ACCOMMODATED BY BALL AND SOCKET JOINTS.
3. EXISTING 30" X 24" X 250# FLANGE TEE.
4. EXISTING BLIND FLANGE ON 250# FLANGE WITH CONCRETE BLOCKING.

KEY PLAN
SCALE: 1" = 20'

Brown AND Caldwell

90% DESIGN

Sammamish Plateau Water

Sammamish Plateau Water PFAS Project

REVISIONS

REV	DATE	DESCRIPTION

LINE IS 2 INCHES AT FULL SIZE

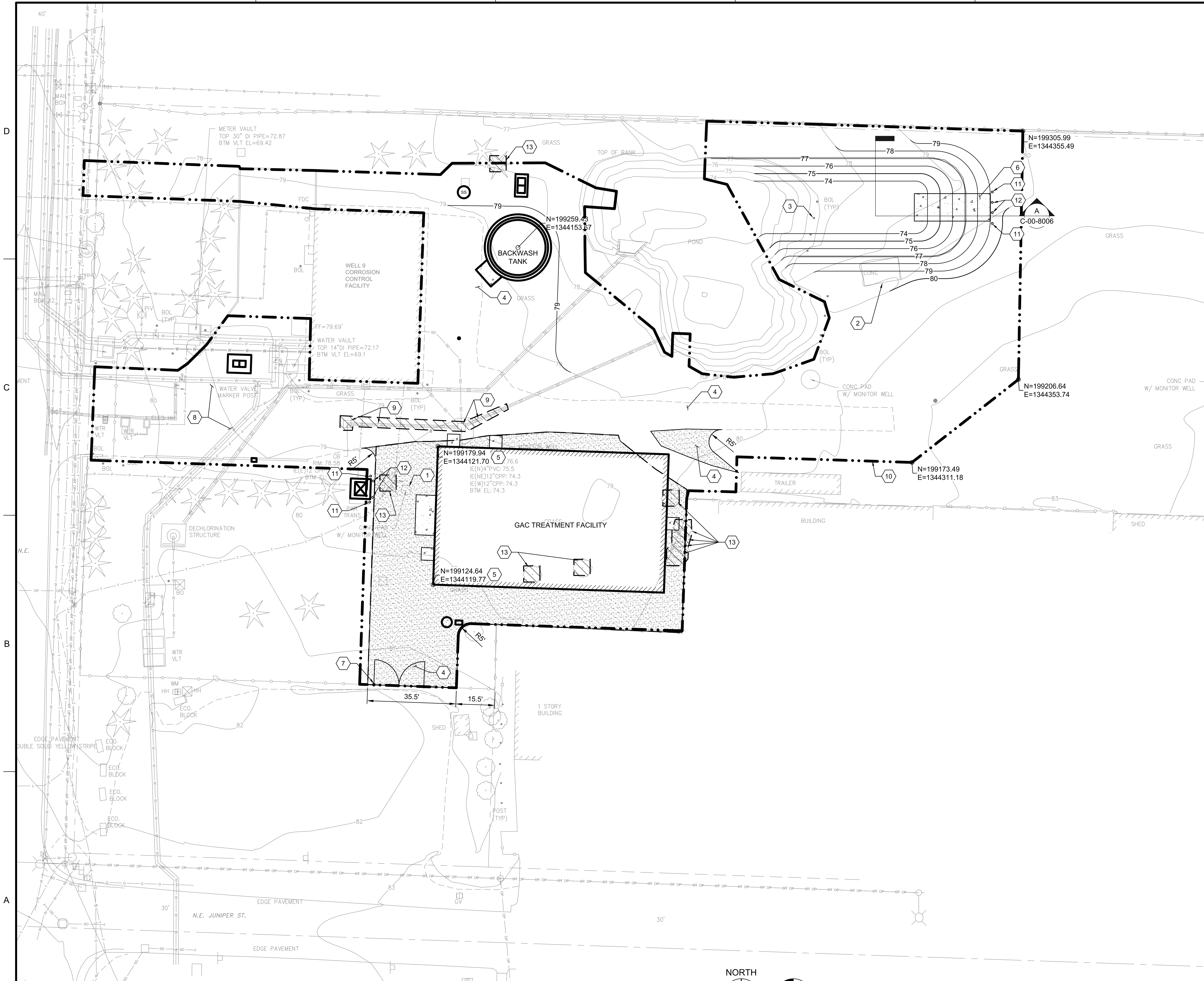
DESIGNED: K.WEBER
DRAWN: K.TOLLE
CHECKED:
CHECKED:
APPROVED:

FILENAME
C-00-1001.dwg
BC PROJECT NUMBER
155452
CLIENT PROJECT NUMBER

CIVIL

EXISTING SITE PLAN

DRAWING NUMBER
C-00-1001
SHEET NUMBER
OF



SITE PLAN

SCALE: 1" = 20'

GENERAL NOTES:

1. PROTECT ALL TREES NOT DESIGNATED FOR REMOVAL.

KEY NOTES:

1. SALVAGE MONITORING EQUIPMENT AND DELIVER TO DISTRICT. DECOMMISSION MONITORING WELL PER WAC 173-160.
2. REMOVE AND DISPOSE CONCRETE SLAB.
3. SALVAGE 4 BOLLARDS FOR POTENTIAL RE-USE.
4. NEW AND RESTORED GRAVEL SURFACING. SEE B/C-00-8007.
5. SEE S-20-1001 FOR LOCATION OF COORDINANTES.
6. SEE A/C-00-8006 AND B/C-00-8006 FOR INFILTRATION POND AND ACCESS ROAD SECTIONS.
7. CHAIN LINK FENCE AND GATE. SEE D/C-00-8007.
8. SEE C-00-8001 FOR PIPING CONNECTION DETAILS IN THIS AREA. SEE C-00-8011 AND C-00-8012 FOR PIPING CONNECTION SEQUENCING.
9. SALVAGE FRAME AND GRATE FOR RE-USE. DEMOLISH AND REMOVE 2 CATCH BASINS AND CONNECTING PIPE TO ALLOW FOR CONSTRUCTION OF NEW PIPING. SEE C-00-4001 FOR YARD PIPING.
10. CONSTRUCTION WORK LIMITS, TOTAL AREA 0.95 ACRES.
11. PERMANENT BOLLARD. SEE D/C-00-8006.
12. REMOVABLE BOLLARD. SEE C/C-00-8006.
13. REMOVE TREE. 9 TOTAL.

KEY PLAN

SCALE: 1" = 20'

Brown AND Caldwell

90% DESIGN

Sammamish Plateau Water

Sammamish
Plateau Water
PFAS Project

REVISIONS

REV	DATE	DESCRIPTION

LINE IS 2 INCHES AT FULL SIZE

DESIGNED: K.WEBER
DRAWN: K.TOLLE
CHECKED:
CHECKED:
APPROVED:

FILENAME
C-00-2001.dwg

BC PROJECT NUMBER
155452

CLIENT PROJECT NUMBER

CIVIL

SITE PLAN

DRAWING NUMBER
C-00-2001

SHEET NUMBER
OF

FILENAME: C-00-2001.DWG PLOT DATE: 12/16/2020 11:39 AM CAD USER: KEITH TOLLE

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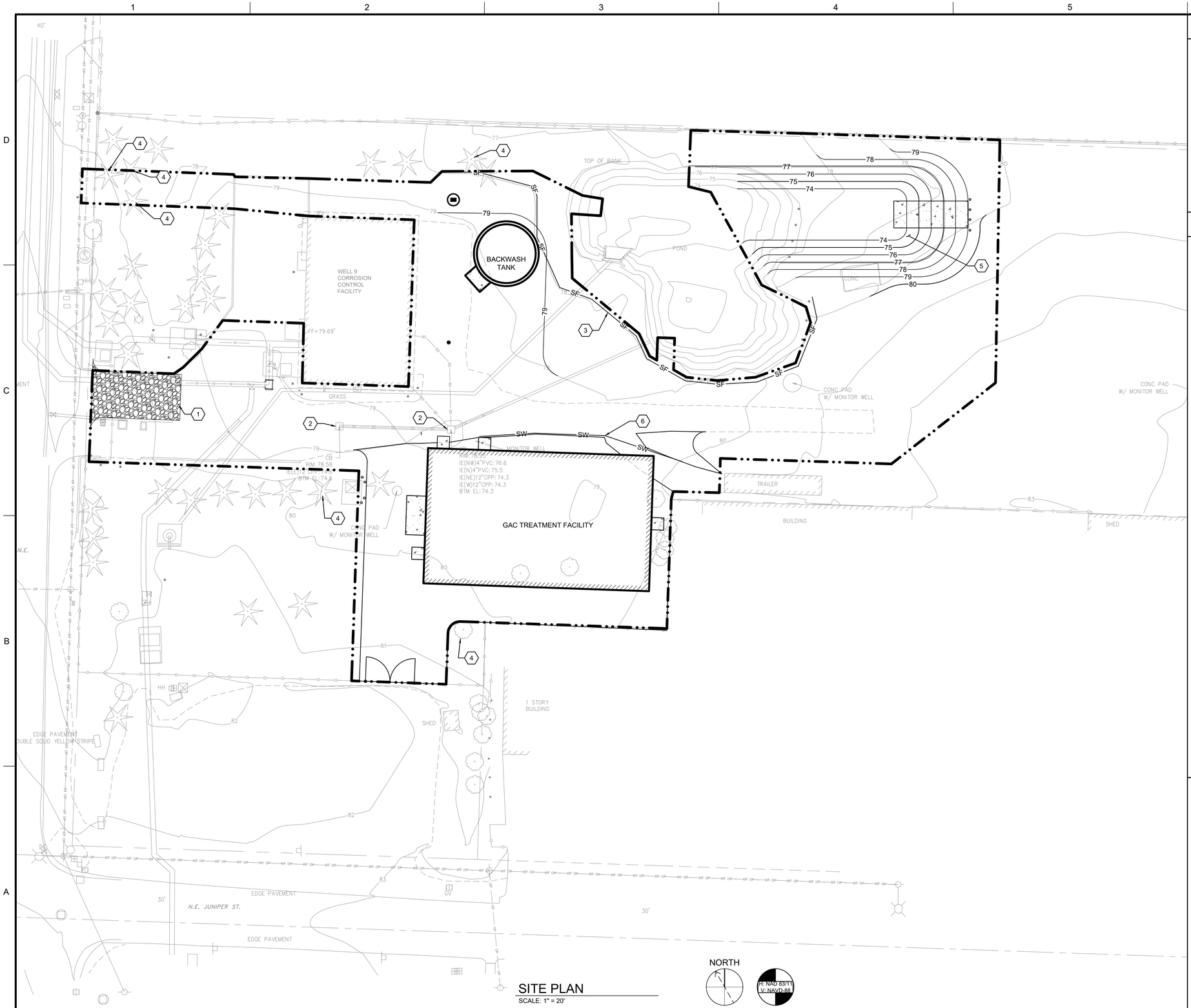
Wagner Archs.jpg



SITE PLAN
SCALE: 1" = 20'

NORTH

H: NAD 83/11
V: NAVD 88

GENERAL NOTES:

1. -

KEY NOTES:

1. STABILIZED CONSTRUCTION ENTRANCE. SEE A/C-00-2004.
2. STORM CATCH BASIN INSERTS. SEE SHEET C/C-00-2004.
3. TEMPORARY SILT FENCE. SEE SHEET D/C-00-2004.
4. TREE PROTECTION. SEE SHEET E/C-00-2004.
5. DO NOT DRIVE OR STORE HEAVY EQUIPMENT IN PROPOSED POND AREA. DRAIN AND/OR PROTECT EXISTING POND WHILE GRADING POND EXPANSION. PREVENT SEDIMENT LADEN WATERS FROM ENTERING EXISTING POND.
6. STRAW WATTLE. SEE SHEET B/C-00-2004.

KEY PLAN
SCALE: 1" = 20'

Brown AND Caldwell

90% DESIGN

Sammamish Plateau Water

Sammamish Plateau Water PFAS Project

REVISIONS

REV	DATE	DESCRIPTION

LINE IS 2 INCHES AT FULL SIZE

DESIGNED: K.WEBER
DRAWN: K.TOLLE
CHECKED:
CHECKED:
APPROVED:

FILENAME
C-00-2002.dwg

BC PROJECT NUMBER
155452

CLIENT PROJECT NUMBER

CIVIL

TESC PLAN

DRAWING NUMBER
C-00-2002

SHEET NUMBER
OF

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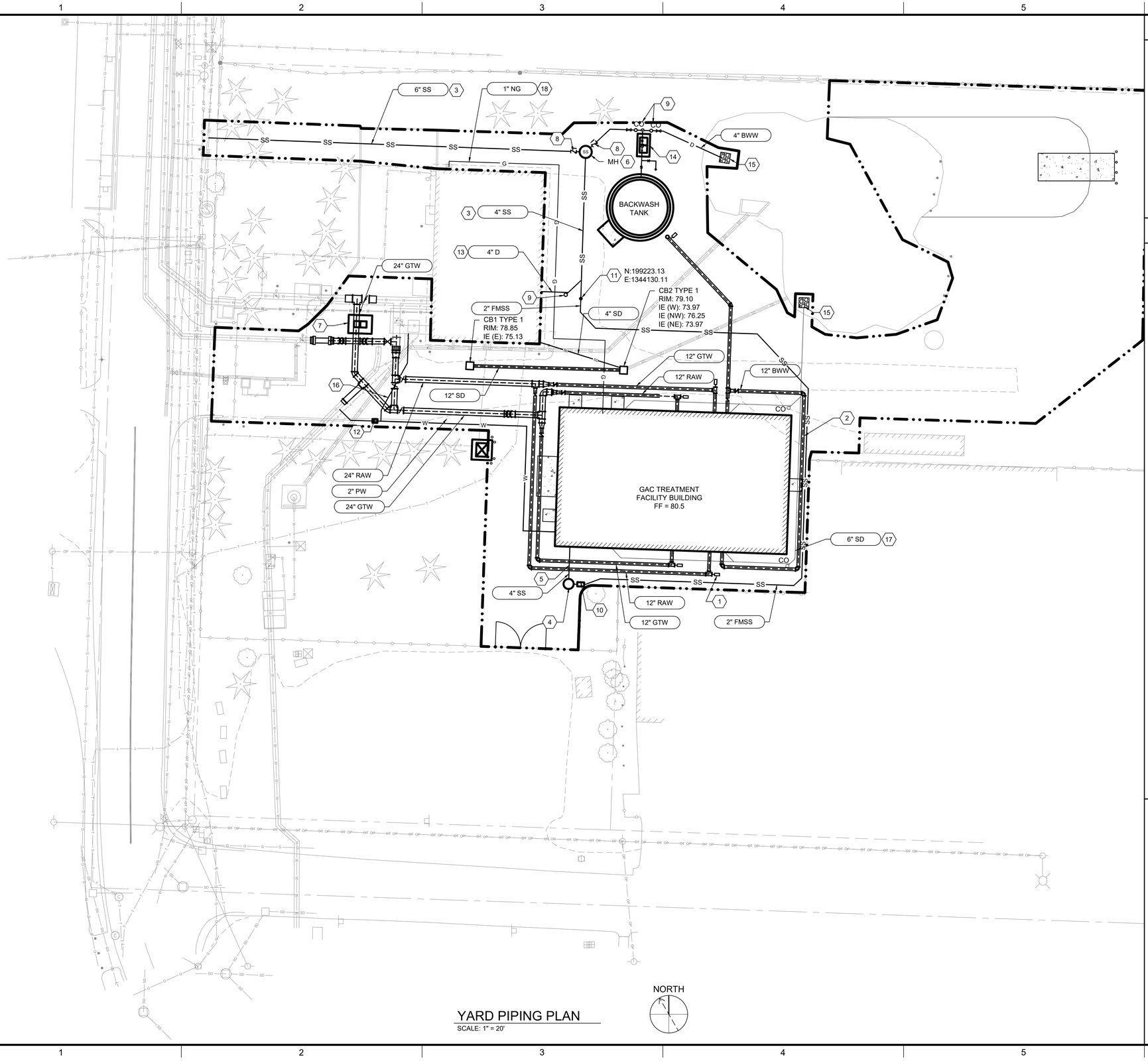
Sammamish Plateau Water



YARD PIPING PLAN

SCALE: 1" = 20'

NORTH

GENERAL NOTES:

1. ALL SS SHALL BE ENCASED IN CONCRETE TO PROTECT WELL HEAD.
2. ALL RAW AND GTW PIPE SHALL BE RESTRAINED JOINT DI.
3. SEE C-00-8002 FOR CONNECTIONS TO EXISTING PIPING.

KEY NOTES:

1. TYPE II BLOW OFF ASSEMBLY, TYP OF 5 TOTAL. 4 NEAR GAC TREATMENT FACILITY BUILDING AND 1 NEAR BACKWASH TANK. SEE A/C-00-8004 AND C-00-6003.
2. STEEL CASING ON BWW EXTENDING FOUNDATION LENGTH ON EAST SIDE OF BUILDING. APPROX. 60 LF. SEE A/C-00-8007.
3. MARK SEWER AND FORCE MAIN WITH TRACER WIRE. SEE F/C-00-8004.
4. GRINDER PUMP. SEE SHEET P-20-3003.
5. NO DI JOINTS OVER WATER PIPE CROSSING.
6. LOW HEAD MANHOLE. SEE E/C-00-8007.
7. CHEMICAL INJECTION VAULT. SEE SHEET C-00-8003.
8. IN-LINE ELASTOMERIC CHECK VALVE. SEE SECTION 40 05 65.35.
9. SIDE SEWER CLEAN OUT. SEE F/C-00-8005.
10. GRINDER PUMP CLEAN OUT. SEE P-20-3002.
11. PRESSURE LINE CONNECTION. SEE E/C-00-8004.
12. 2" METER SETTER. SEE I/C-00-8005.
13. CONFIRM EXISTING DRAIN DEPTH ALLOWS FOR GRAVITY FLOW AT 1% MIN SLOPE TO NEW MH BEFORE DISCONNECTING EXISTING PIPE. MAXIMIZE SLOPE ON NEW PIPE.
14. BACKWASH WATER FLOW CONTROL VAULT. SEE SHEET C-20-8001.
15. 4 FT X 4 FT SQUARE, 1.5 FT THICK QUARRY SPALL OUTLET PROTECTION PAD.
16. FIELD ROUTE 1" COPPER SAMPLE LINE. SADDLE TAP 2" WATER LINE DOWNSTREAM OF METER AND ROUTE TO VAULT. CAP INSIDE VAULT. EXISTING SAMPLE LINE TO BE ABANDONED.
17. CONNECT AT DOWNSPOUT LOCATIONS AND ROUTE TO INFILTRATION MAINTAINING MINIMUM 1% SLOPE AND 12" COVER. PROTECT PIPE CROSSINGS AS REQUIRED.
18. CONNECT TO EXISTING NATURAL GAS LINE BEFORE REGULATOR/METER ON BUILDING. SEE SECTION 23 11 23.

KEY PLAN

SCALE: 1" = 20'

Brown AND Caldwell

90% DESIGN

Sammamish Plateau Water

Sammamish Plateau Water PFAS Project

REVISIONS

REV	DATE	DESCRIPTION

LINE IS 2 INCHES AT FULL SIZE

DESIGNED: K.WEBER

DRAWN: K.TOLLE

CHECKED:

CHECKED:

APPROVED:

FILENAME
C-00-4001.dwg

BC PROJECT NUMBER
155452

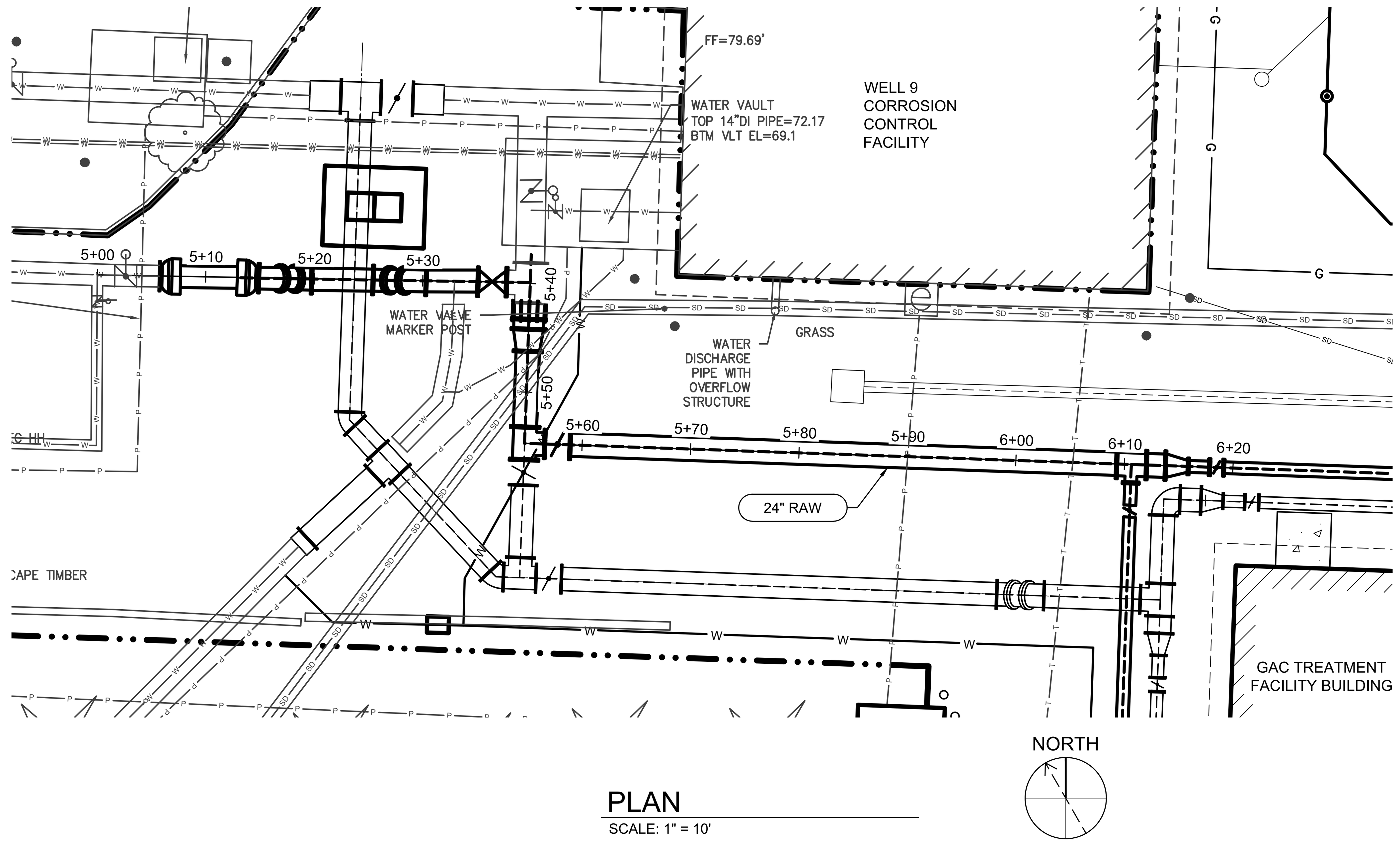
CLIENT PROJECT NUMBER

CIVIL

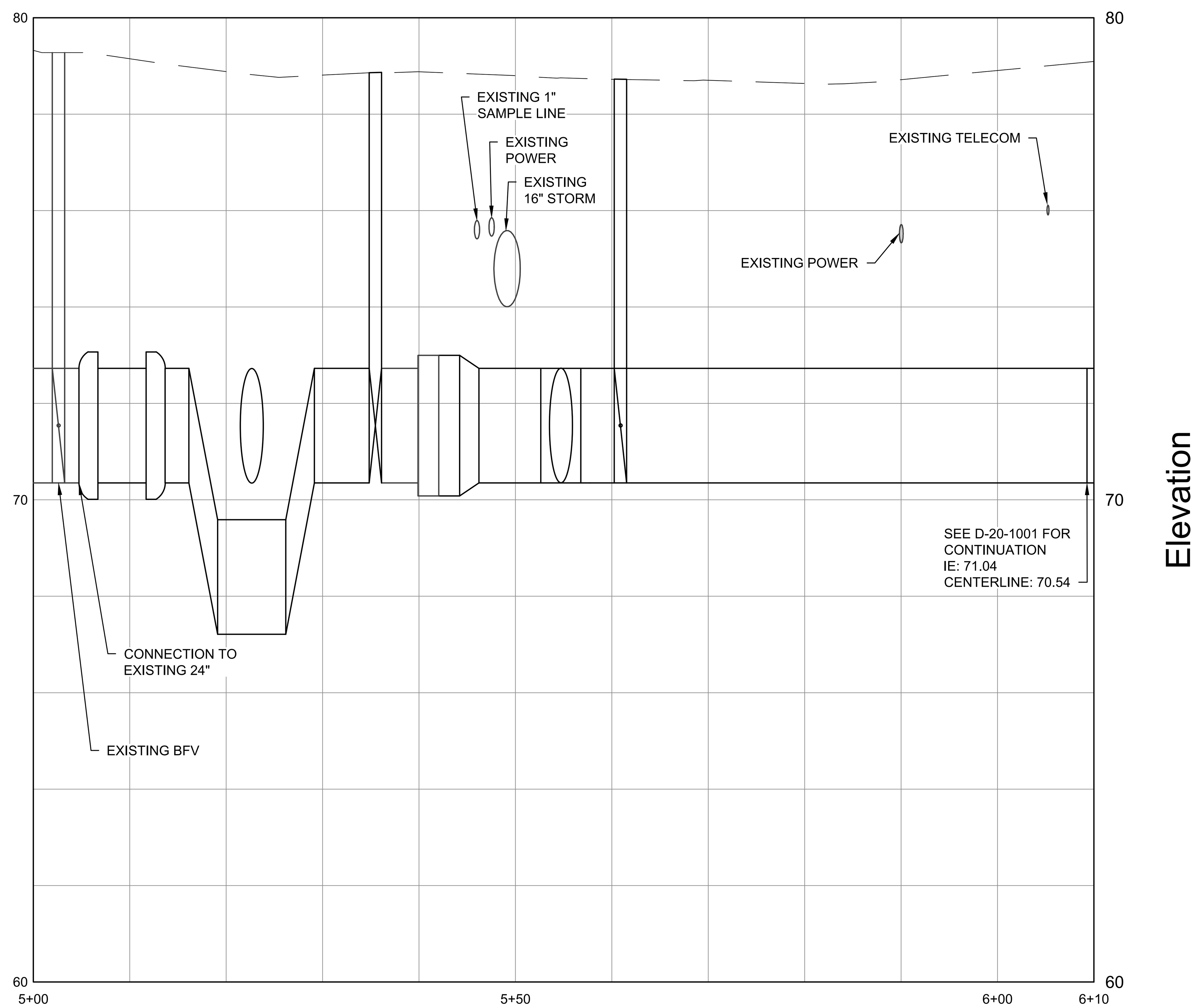
UTILITY PLAN

DRAWING NUMBER
C-00-4001

SHEET NUMBER
OF



PLAN
SCALE: 1" = 10'



PROFILE
SCALE: H = 1" = 10': V = 1" = 2'

GENERAL NOTES:

1. CONTRACTOR TO VERIFY LOCATION OF EXISTING UTILITIES AND PROTECT AS NECESSARY.
2. SEE C-00-8002 FOR PIPING CONNECTION DETAILS.
3. SLOPE PIPE SO THERE ARE NO HIGH POINTS OR LOW POINTS.

KEY NOTES:

1 .

KEY PLAN
SCALE: 1" = 20'

Brown AND Caldwell

90% DESIGN

Sammamish Plateau Water

Sammamish
Plateau Water
PFAS Project

REVISIONS

REV	DATE	DESCRIPTION

LINE IS 2 INCHES
AT FULL SIZE

DESIGNED: K.WEBER
DRAWN: K.TOLLE
CHECKED:
CHECKED:
APPROVED:

FILENAME
C-00-6001.dwg

BC PROJECT NUMBER
155452

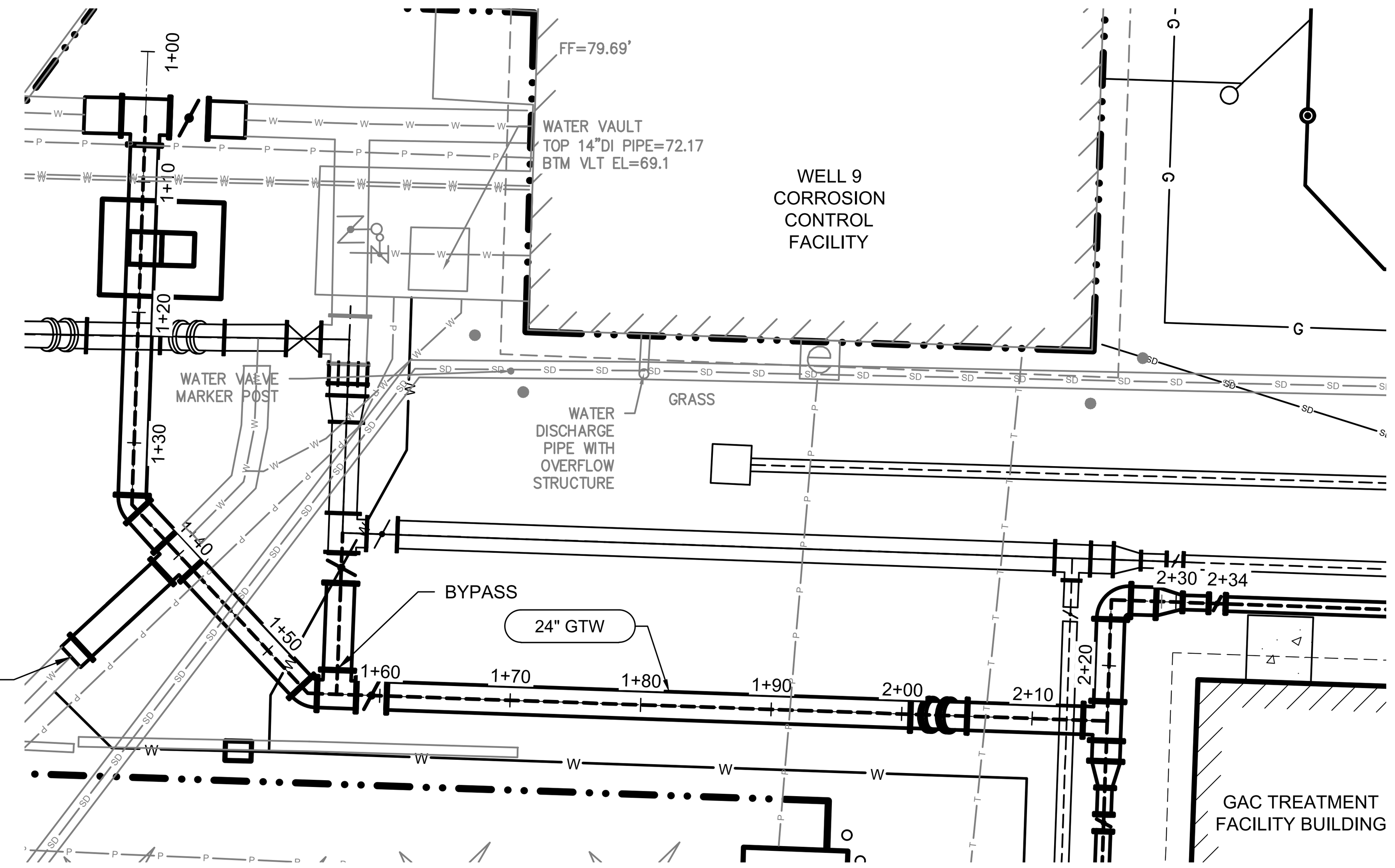
CLIENT PROJECT NUMBER

CIVIL

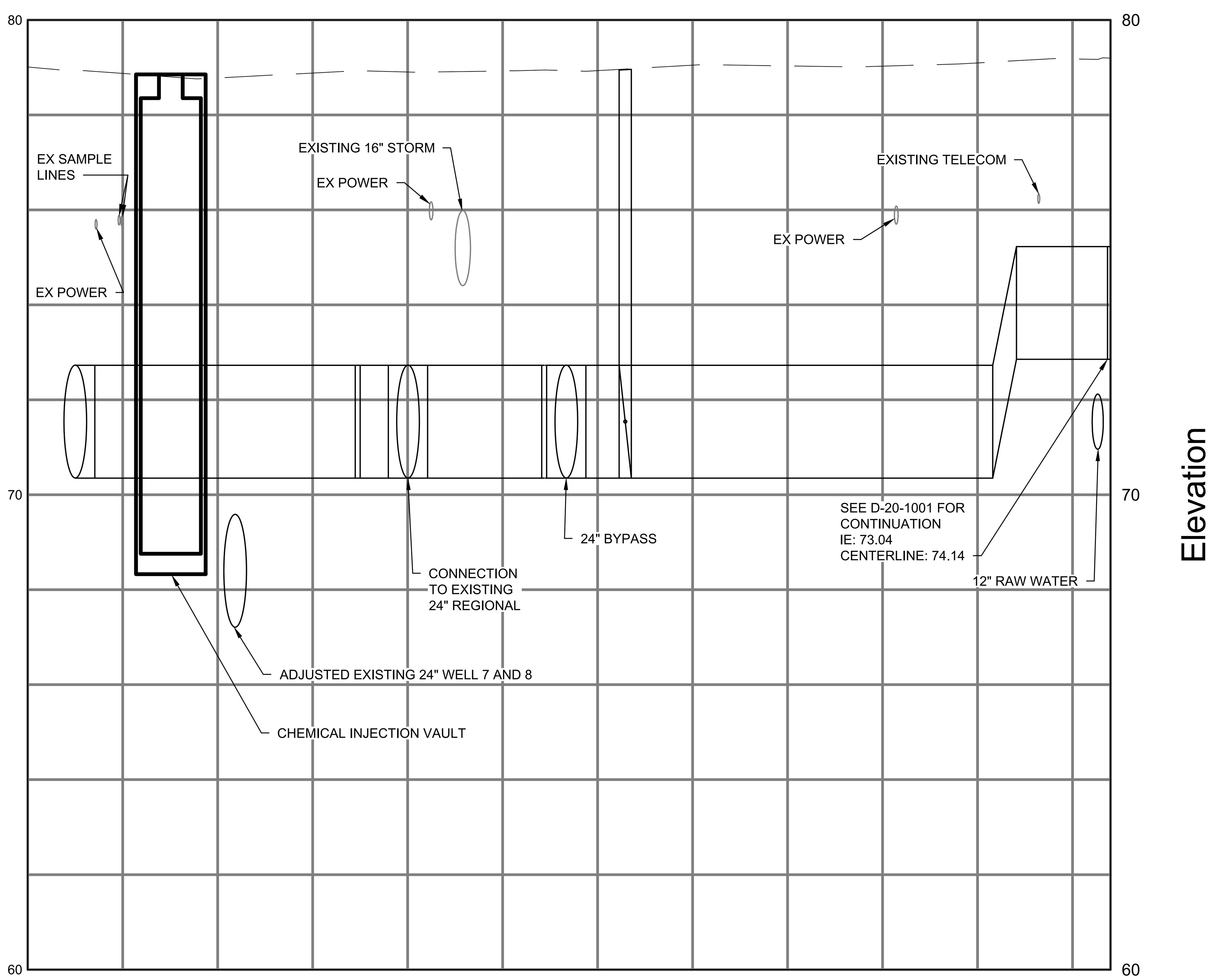
RAW PIPE PLAN
AND PROFILE

DRAWING NUMBER
C-00-6001

SHEET NUMBER
OF



PLAN
SCALE: 1" = 10'



PROFILE
SCALE: H = 1" = 10': V = 1" = 2'

GENERAL NOTES:

1. CONTRACTOR TO VERIFY LOCATION OF EXISTING UTILITIES AND PROTECT AS NECESSARY.
2. SEE C-00-8002 FOR PIPING CONNECTION DETAILS.
3. SLOPE PIPE SO THERE ARE NO HIGH POINTS OR LOW POINTS.

KEY NOTES:

1 .

KEY PLAN
SCALE: 1" = 20'

Brown AND Caldwell

90% DESIGN

Sammamish Plateau Water

Sammamish
Plateau Water
PFAS Project

REVISIONS

REV	DATE	DESCRIPTION

LINE IS 2 INCHES
AT FULL SIZE

DESIGNED: K.WEBER
DRAWN: K.TOLLE
CHECKED:
CHECKED:
APPROVED:

FILENAME
C-00-6002.dwg

BC PROJECT NUMBER
155452

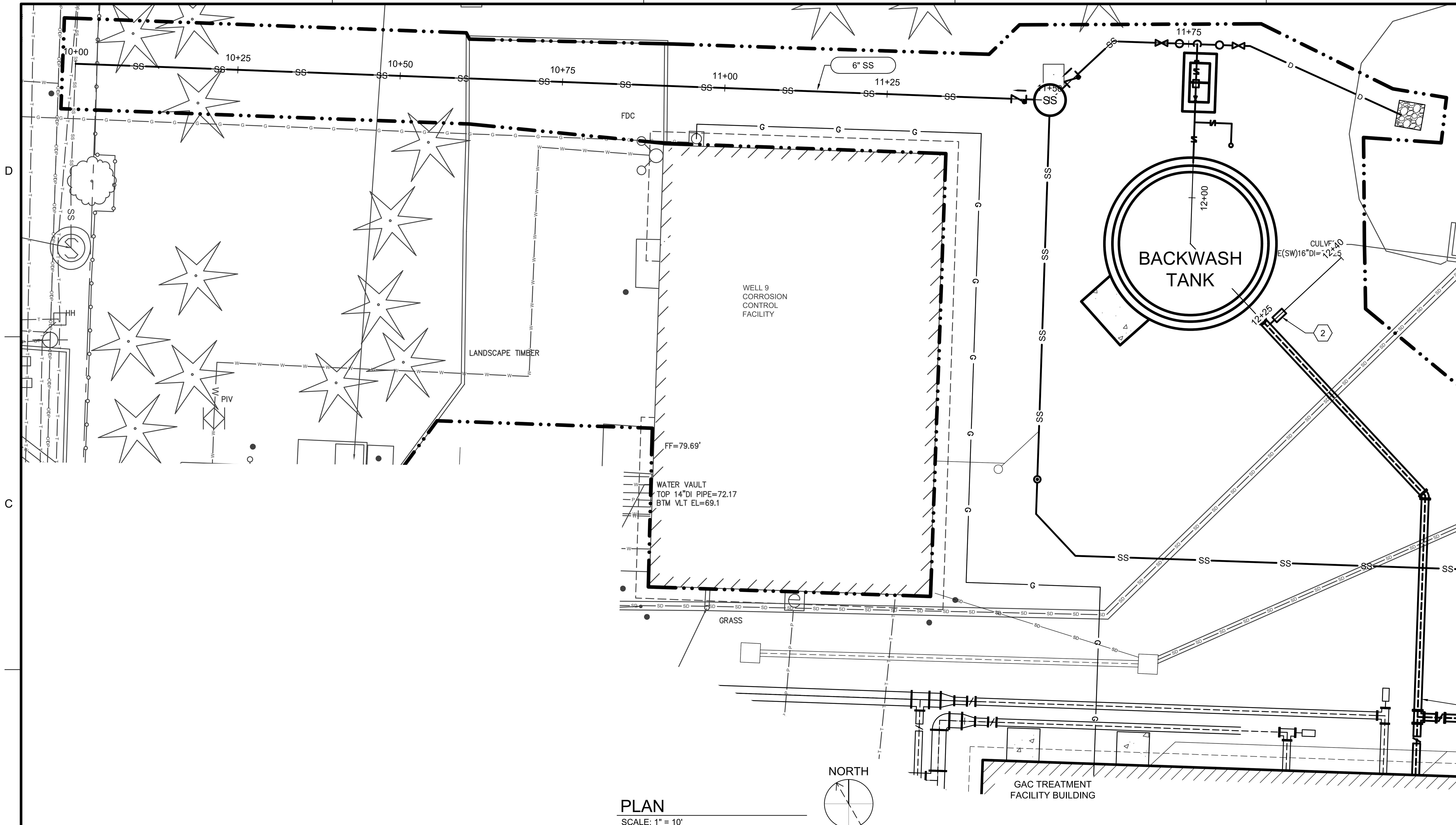
CLIENT PROJECT NUMBER

CIVIL

GTW PIPE PLAN AND PROFILE

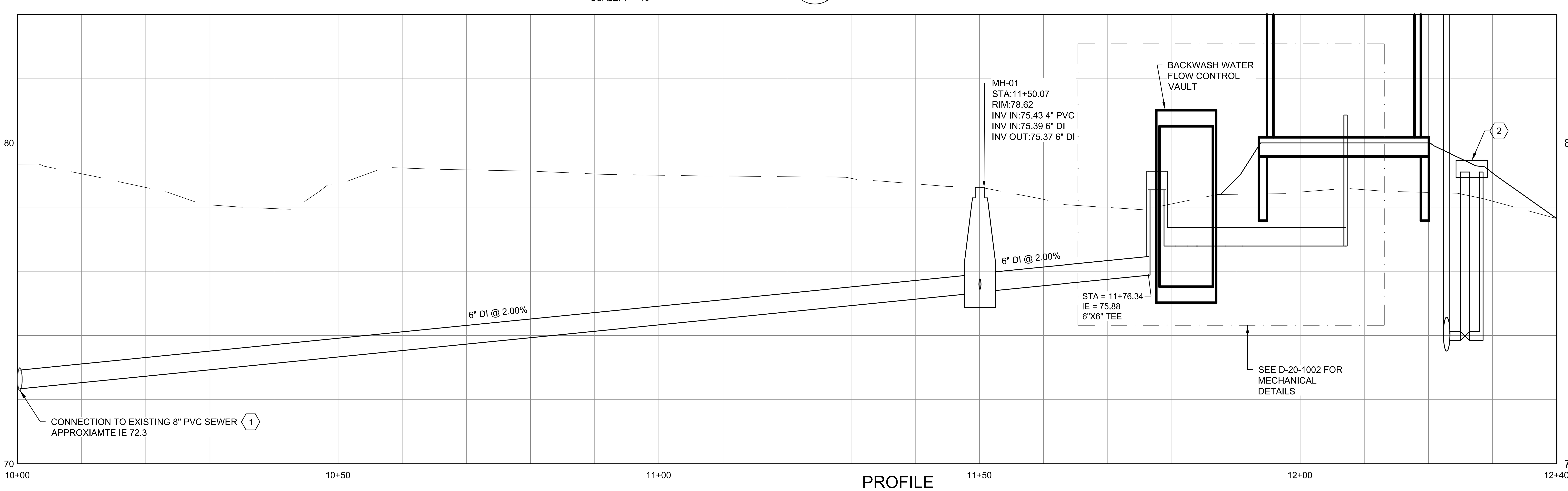
DRAWING NUMBER
C-00-6002

SHEET NUMBER
OF



PLAN

SCALE: 1" = 10'



PROFILE

SCALE: H = 1" = 10': V = 1" = 2'

GENERAL NOTES:

1. CONTRACTOR TO VERIFY LOCATION OF EXISTING UTILITIES AND PROTECT AS NECESSARY.
2. SEE C-00-8002 FOR PIPING CONNECTION DETAILS.
3. SLOPE PIPE SO THERE ARE NO HIGH POINTS OR LOW POINTS.

KEY NOTES:

1. CONTRACTOR TO VERIFY SIZE, MATERIAL AND LOCATION OF EXISTING SEWER. CONNECT TO EXISTING SEWER. SEE SHEET C-00-8005.
2. TYPE II BLOW OFF ASSEMBLY. SEE A/C-00-8004.

Brown AND Caldwell

90% DESIGN

Sammamish Plateau Water

Sammamish
Plateau Water
PFAS Project

REVISIONS

REV	DATE	DESCRIPTION

LINE IS 2 INCHES AT FULL SIZE

DESIGNED: K.WEBER
DRAWN: K.TOLLE
CHECKED:
CHECKED:
APPROVED:

FILENAME
C-00-6003.dwg

BC PROJECT NUMBER
155452

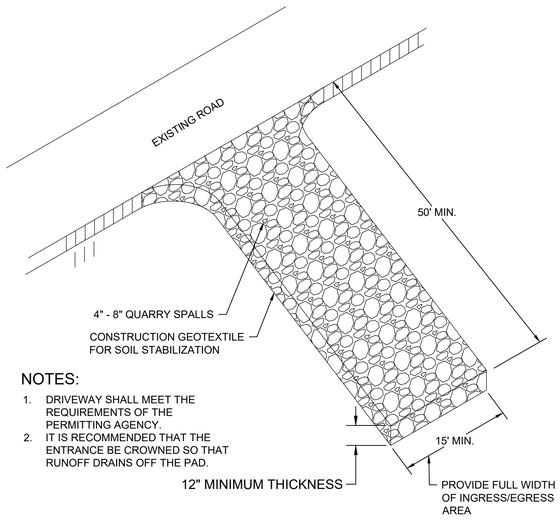
CLIENT PROJECT NUMBER

CIVIL

BWW PIPE PLAN AND PROFILE

DRAWING NUMBER
C-00-6003

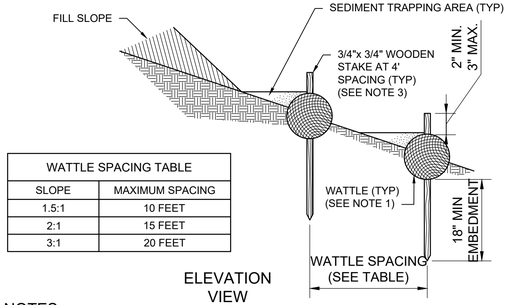
SHEET NUMBER
OF



NOTES:

1. DRIVEWAY SHALL MEET THE REQUIREMENTS OF THE PERMITTING AGENCY.
2. IT IS RECOMMENDED THAT THE ENTRANCE BE CROWNED SO THAT RUNOFF DRAINS OFF THE PAD.

A STABILIZED CONSTRUCTION ENTRANCE
C-00-2003 SCALE: NTS



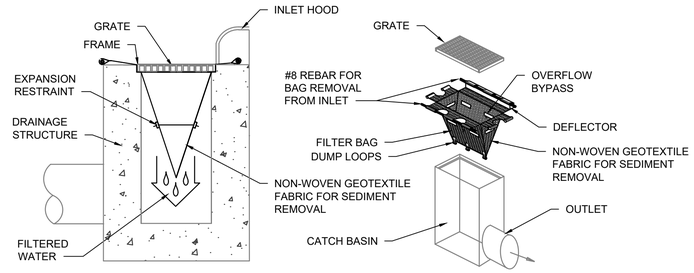
WATTLE SPACING TABLE	
SLOPE	MAXIMUM SPACING
1.5:1	10 FEET
2:1	15 FEET
3:1	20 FEET

ELEVATION VIEW

NOTES:

1. INSTALL WATTLES ALONG CONTOURS.
2. WATTLES SHALL BE INSPECTED REGULARLY AND IMMEDIATELY AFTER EVERY 0.25" RAINFALL, OR BASED ON LOCAL CONDITIONS OR REQUIREMENTS, TO ENSURE THEY REMAIN THOROUGHLY ENTRENCHED AND IN CONTACT WITH THE SOIL.
3. LIVE STAKES WILL BE USED IN PLACE OF WOODEN STAKES FOR PERMANENT INSTALLATIONS AND LEFT IN PLACE.
4. PERFORM MAINTENANCE AS NEEDED TO MAINTAIN EFFECTIVENESS.
5. INSTALL WATTLES SNUGLY INTO THE TRENCH. ABUT ADJACENT WATTLES TIGHTLY, END TO END, WITHOUT OVERLAPPING THE ENDS.
6. PILOT HOLES MAY BE DRIVEN THROUGH THE WATTLE AND INTO THE SOIL, WHEN SOIL CONDITIONS REQUIRE.

B STRAW WATTLE
C-00-2003 SCALE: NTS



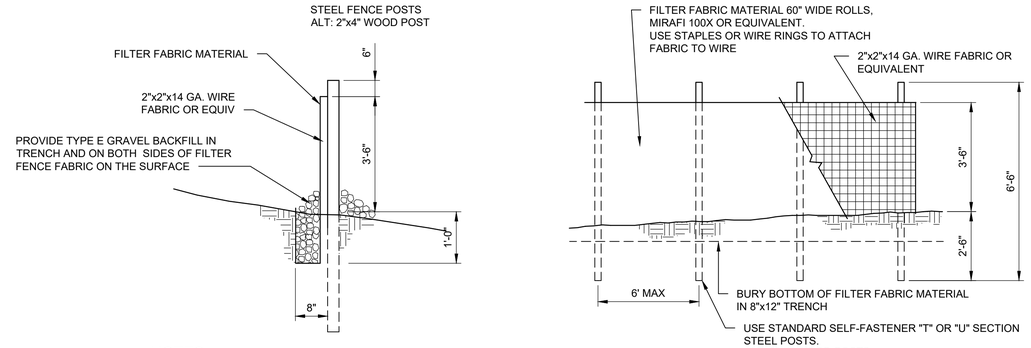
CATCH BASIN SECTION

ISOMETRIC VIEW

NOTES:

1. INLET PROTECTION SHALL BE INSTALLED PRIOR TO CLEARING AND GRADING OR EXCAVATION ACTIVITY.
2. CONTRACTOR TO PERFORM MAINTENANCE AS NEEDED TO MAINTAIN A FUNCTIONING INLET PROTECTION.
3. INLET PROTECTION SHALL, AT A MINIMUM, BE INSPECTED WEEKLY AND WITH IN 24 HOURS WHEN 0.25" RAIN ACCUMULATES WITHIN A 24-HOUR PERIOD, OR BASED ON LOCAL CONDITIONS OR REQUIREMENTS.
4. SEDIMENT SHALL BE REMOVED FROM THE UNIT WHEN IT BECOMES HALF FILLED OR SEDIMENT IS WITHIN 6" FROM BOTTOM OF THE OVERFLOW.
5. SEDIMENT REMOVAL SHALL BE ACCOMPLISHED BY REMOVING THE INSERT, EMPTYING, AND RE-INSERTING IT INTO THE CATCH BASIN. DISPOSE OF SEDIMENT IN ACCORDANCE WITH LOCAL, STATE AND FEDERAL REGULATIONS.
6. CARE SHALL BE TAKEN SO THAT SEDIMENT TRAPPED IN THE FABRIC DOES NOT FALL INTO STRUCTURE DURING REMOVAL. MATERIAL THAT FALLS INTO STRUCTURE SHALE BE REMOVED IMMEDIATELY.
7. DURING THE CONSTRUCTION PERIOD, ADDITIONAL CATCH BASIN INSERTS OTHER THAN THOSE INDICATED ON THE DRAWINGS SHOULD BE INSTALLED AS NEEDED TO PREVENT CONSTRUCTION RUNOFF FROM LEAVING THE SITE.
8. FILTER BAGS SHALL BE REMOVED FROM THE CATCH BASIN ONCE CONTRACTOR GETS APPROVAL FROM JURISDICTIONAL REVIEWER OR INSPECTOR.
9. CONTRACTOR TO HAVE FILTER BAG MATERIAL AND CONSTRUCTION APPROVED BY OWNER/ENGINEER PRIOR TO IMPLEMENTING.
10. THE CATCH BASIN INSERT SHALL HAVE A BUILT-IN HIGH FLOW RELIEF SYSTEM (OVERFLOW BYPASS).
11. NON-WOVEN GEOTEXTILE FABRIC SHALL BE USED OR AS STATED IN LOCAL REQUIREMENTS.

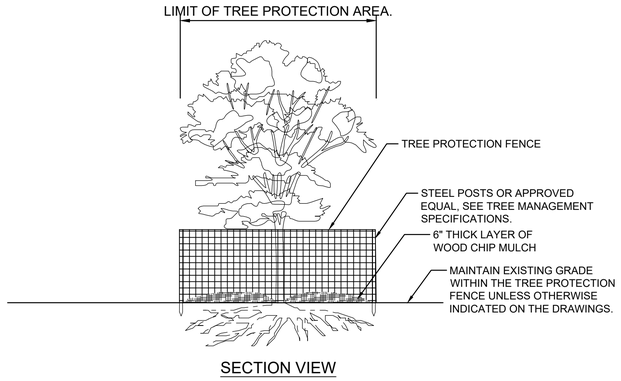
C STORM CATCH BASIN INSERT
C-00-2003 SCALE: NTS



NOTES:

1. THE FILTER FABRIC SHALL BE PURCHASED IN A CONTINUOUS ROLL CUT TO THE LENGTH OF THE BARRIER TO AVOID USE OF JOINTS. WHEN JOINTS ARE NECESSARY, FILTER CLOTH SHALL BE SPLICED TOGETHER ONLY AT A SUPPORT POST, WITH A MINIMUM 6-INCH OVERLAP, AND BOTH ENDS SECURELY FASTENED TO THE POST.
2. THE FENCE POSTS SHALL BE SPACED A MAXIMUM OF 6 FEET APART AND DRIVEN SECURELY INTO THE GROUND (MINIMUM OF 30 INCHES).
3. A TRENCH SHALL BE EXCAVATED, ROUGHLY 8 INCHES WIDE AND 12 INCHES DEEP, UPSLOPE AND ADJACENT TO THE WOOD POST TO ALLOW THE FILTER FABRIC TO BE BURIED.
4. FILTER FABRIC SHALL BE FASTENED SECURELY TO THE UPSLOPE SIDE OF THE POSTS USING HEAVY-DUTY WIRE STAPLES AT LEAST 1 INCH LONG. THE FILTER FABRIC SHALL EXTEND INTO THE TRENCH A MINIMUM OF 12 INCHES AND SHALL NOT EXTEND MORE THAN 36 INCHES ABOVE THE ORIGINAL GROUND SURFACE.
5. THE TRENCH SHALL BE BACKFILLED WITH TYPE E GRAVEL BACKFILL.
6. UNLESS OTHERWISE NOTED, FILTER FABRIC FENCES SHALL BE REMOVED WHEN THEY HAVE SERVED THEIR USEFUL PURPOSE, BUT NOT BEFORE THE UPSLOPE AREA HAS BEEN PERMANENTLY STABILIZED.
7. FILTER FABRIC FENCES SHALL BE INSPECTED IMMEDIATELY AFTER EACH RAINFALL AND AT LEAST DAILY DURING PROLONGED RAINFALL. ANY REQUIRED REPAIRS SHALL BE MADE IMMEDIATELY.
8. REMOVE SEDIMENT WHEN IT REACHES 12 " IN HEIGHT, AND AT SUBSTANTIAL COMPLETION.

D TEMPORARY SILT FENCE
C-00-2003 SCALE: NTS



SECTION VIEW

NOTES:

1. NO PRUNING SHALL BE PERFORMED UNLESS UNDER THE DIRECTION OF AN ARBORIST AND WITH APPROVAL BY THE CONSTRUCTION MANAGER.
2. NO EQUIPMENT SHALL BE STORED OR OPERATED INSIDE THE PROTECTIVE FENCING INCLUDING DURING FENCE INSTALLATION AND REMOVAL.
3. NO STORAGE OF MATERIALS SHALL OCCUR INSIDE THE PROTECTIVE FENCING.
4. UNAUTHORIZED ACTIVITIES IN TREE PROTECTION AREA SHALL REQUIRE EVALUATION BY PROJECT ARBORIST TO IDENTIFY IMPACTS AND MITIGATION REQUIRED.
5. EXPOSED ROOTS: FOR ROOTS > 1" DAMAGED DURING CONSTRUCTION, MAKE A CLEAN STRAIGHT CUT TO REMOVED DAMAGED PORTION AND INFORM PROJECT ARBORIST.

E TREE PROTECTION
C-00-2003 SCALE: NTS

Brown AND Caldwell

90% DESIGN

Sammamish Plateau Water

Sammamish Plateau Water PFAS Project

REVISIONS

REV	DATE	DESCRIPTION

LINE IS 2 INCHES AT FULL SIZE

DESIGNED: K.WEBER
DRAWN: K.TOLLE
CHECKED:
CHECKED:
APPROVED:

FILENAME
C-00-8001.dwg
BC PROJECT NUMBER
155452
CLIENT PROJECT NUMBER

TESC DETAILS

DRAWING NUMBER
C-00-8001

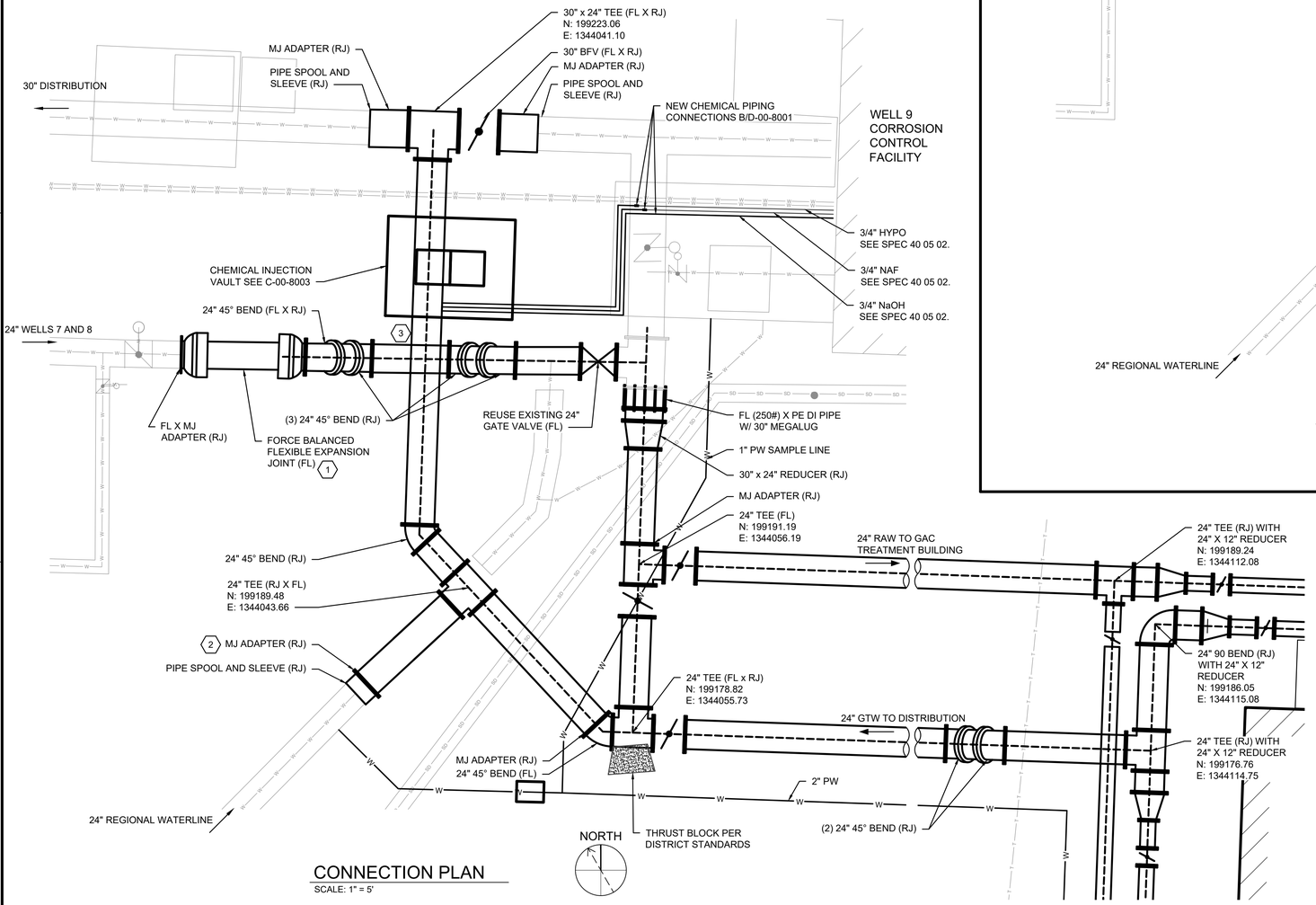
SHEET NUMBER
OF

GENERAL NOTES:

1. ALL NORTHING AND EASTINGS ARE LOCATED AT CENTER OF TEE OR BEND.
2. SMALL DIAMETER PIPE FITTING AND CONNECTIONS NOT SHOWN.
3. IF RJ ENDS ON FITTINGS ARE NOT AVAILABLE, REPLACE WITH FL AND USE MJ ADAPTER WITH MEGALUG.
4. JOINTS SHOWN ARE DIAGRAMATIC AND DO NOT INDICATE JOINT TYPE.
5. ALL RESTRAINED JOINTS (RJ) CAN BE RESTRAINED USING MECHANICAL JOINTS WITH MEGALUGS UNLESS OTHERWISE NOTED.
6. NOT ALL SLEEVES, AND FITTINGS REQUIRED FOR ASSEMBLY SHOWN.
7. SEE C-00-8011 to 8012 FOR PIPE CONNECTION AND TESTING DETAILS.

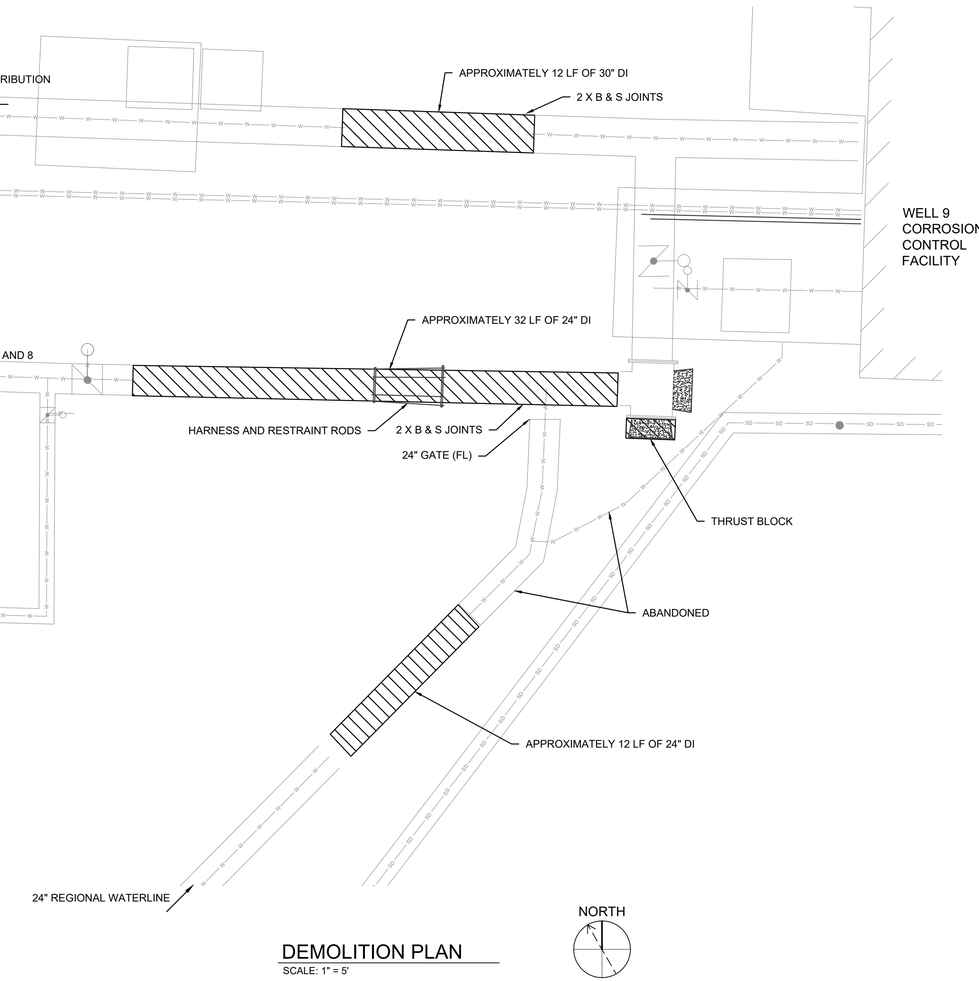
KEY NOTES:

1. USE FORCED BALANCED FLEXIBLE EXPANSION JOINT TO ACCOMMODATE MISALIGNMENT IN EXISTING PIPE. SEE SECTION 40 05 06.
2. DEFLECT RJ FITTINGS TO ACCOMMODATE PIPE DEFLECTION SHOWN. APPROXIMATELY 2 DEGREES TOTAL.
3. 24" GOING EAST WEST GOES UNDER 24" GOING NORTH SOUTH.



CONNECTION PLAN

SCALE: 1" = 5'



DEMOLITION PLAN

SCALE: 1" = 5'

Brown AND Caldwell

90% DESIGN

Sammamish Plateau Water

Sammamish Plateau Water PFAS Project

REVISIONS

REV	DATE	DESCRIPTION

LINE IS 2 INCHES AT FULL SIZE

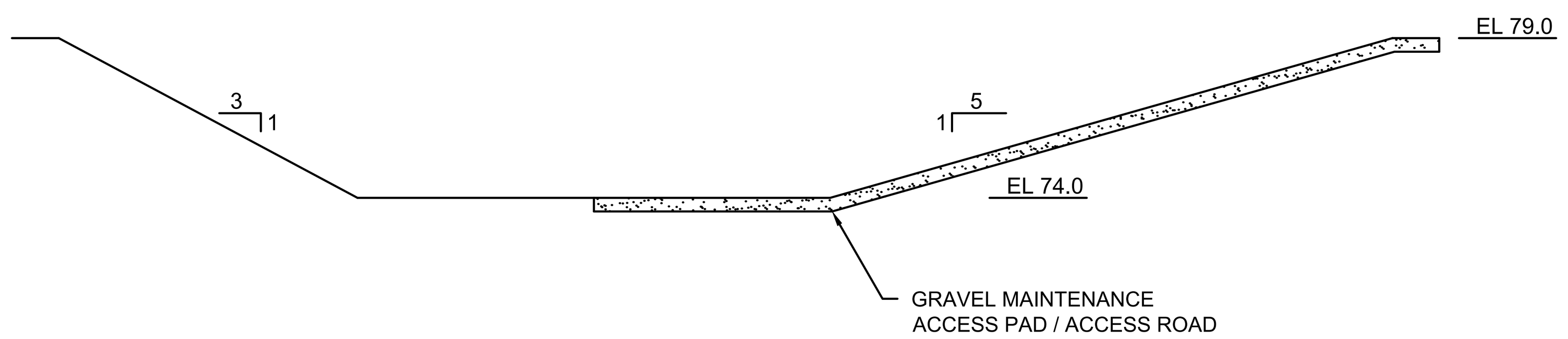
DESIGNED: K.WEBER
DRAWN: K.TOLLE
CHECKED:
CHECKED:
APPROVED:

FILENAME
C-00-8002.dwg
BC PROJECT NUMBER
155452
CLIENT PROJECT NUMBER

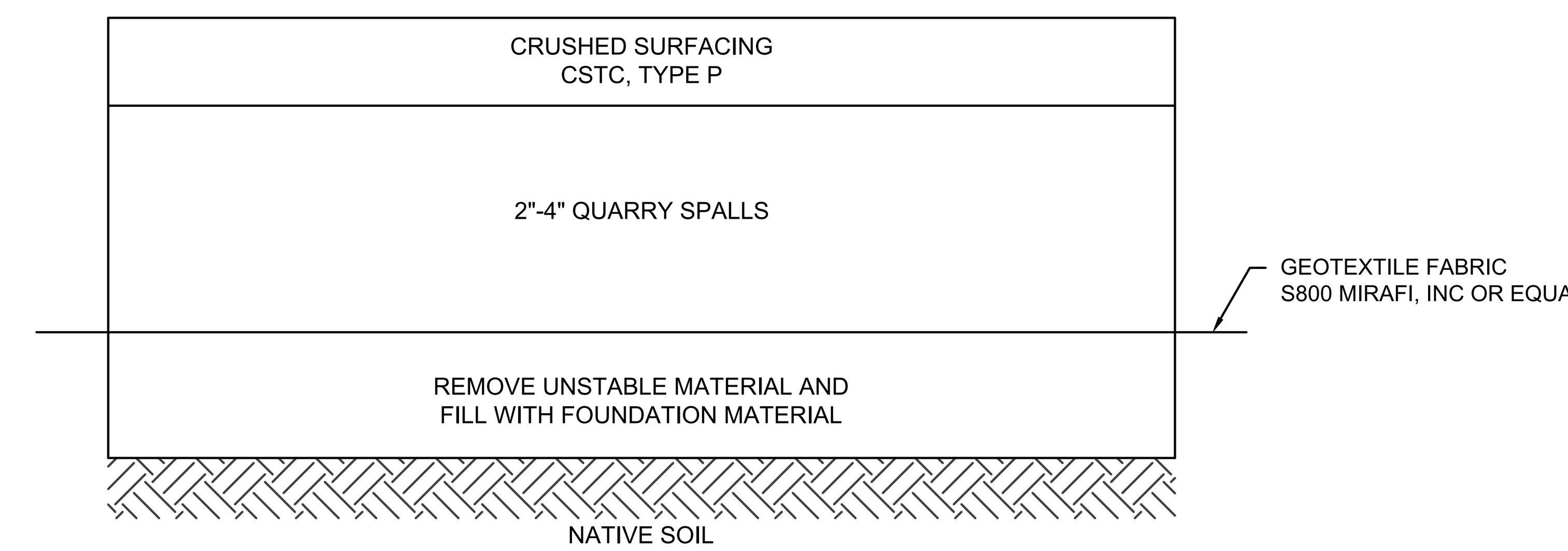
CIVIL

PIPING CONNECTIONS DETAIL

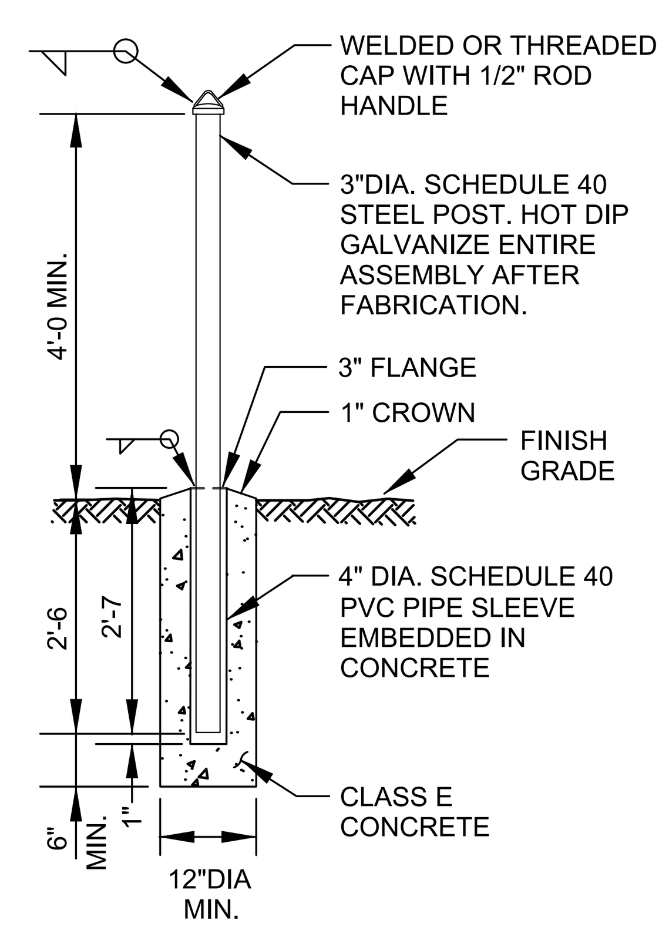
DRAWING NUMBER
C-00-8002
SHEET NUMBER
OF



A C-00-2001 **CROSS-SECTION OF INFILTRATION POND**
SCALE: NTS

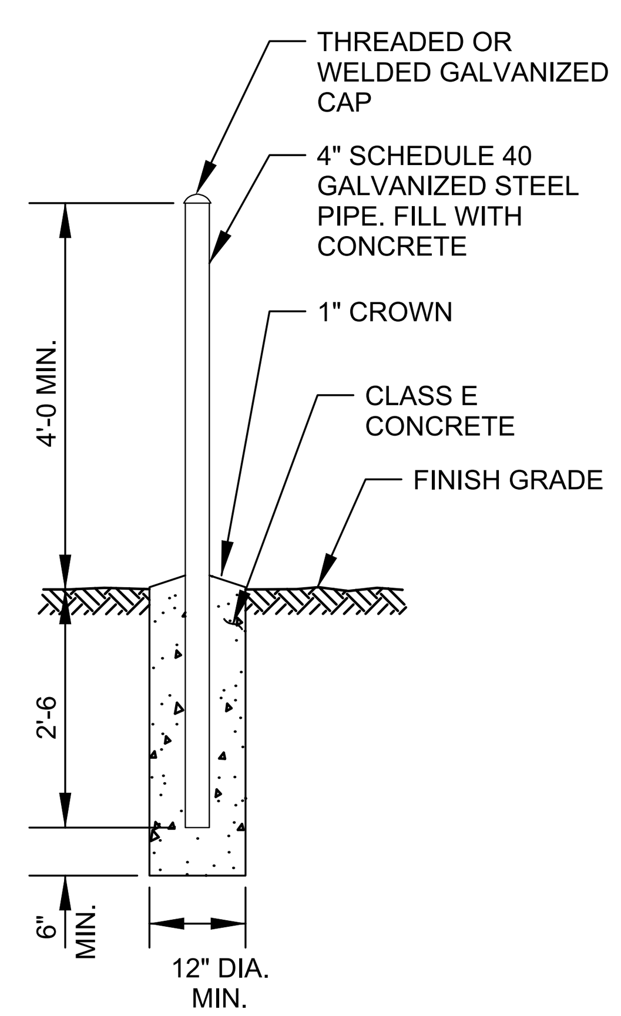


B C-00-2001 **ACCESS ROAD AND PAD PAVING CROSS-SECTION**
SCALE: NTS



NOTE:
1. RE-USE SALVAGED BOLLARDS AT POND LOCATION IF POSSIBLE

C C-00-2001 **REMOVABLE BOLLARD**
SCALE: NTS



NOTE:
1. RE-USE SALVAGED BOLLARDS AT POND LOCATION IF POSSIBLE

D C-00-2001 **PERMANENT BOLLARD**
SCALE: NTS

Brown AND Caldwell

90% DESIGN

Sammamish Plateau Water

Sammamish
Plateau Water
PFAS Project

REVISIONS		
REV	DATE	DESCRIPTION

LINE IS 2 INCHES AT FULL SIZE

DESIGNED: K.WEBER
DRAWN: K.TOLLE
CHECKED:
CHECKED:
APPROVED:

FILENAME
C-00-8006.dwg

BC PROJECT NUMBER
155452

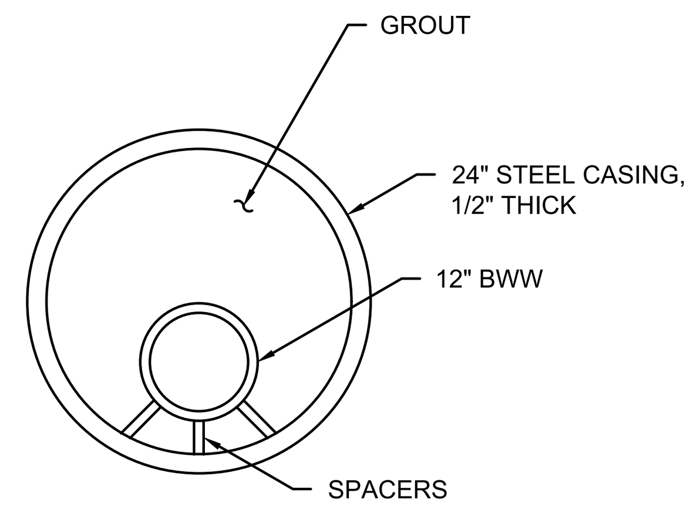
CLIENT PROJECT NUMBER

CIVIL

INFILTRATION POND SECTIONS AND DETAILS

DRAWING NUMBER
C-00-8006

SHEET NUMBER
OF

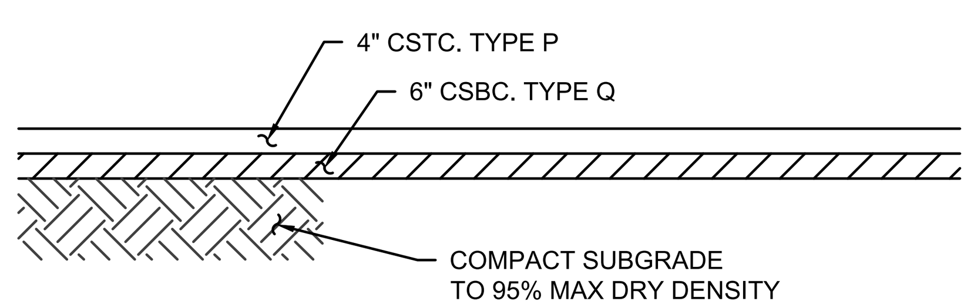


STEEL CASING

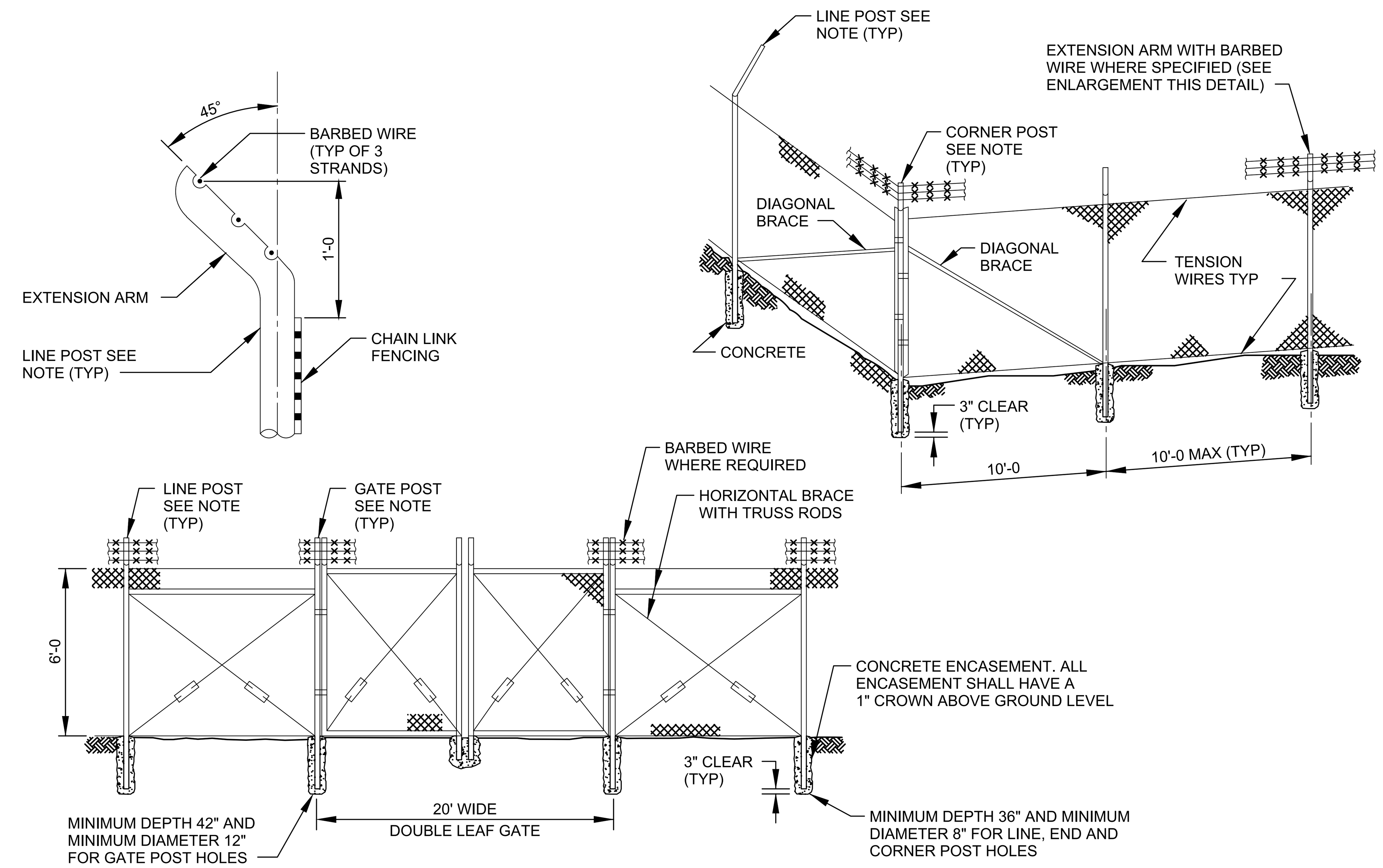
NOTE:

1. CASING DIAMETER AND THICKNESS ARE MINIMUMS. CONTRACTOR TO INCREASE IF NECESSARY FOR CONTRACTOR METHODS.
2. BLOCK CASING ENDS AS NEEDED FOR FILLING OF ANNULAR SPACE.
3. CONTRACTOR TO CONFIRM NUMBER OF SPACERS NEEDED AND SECURE SPACERS TO PIPE AS REQUIRED TO MAINTAIN ELEVATION AND GRADE IN CARRIER PIPE.

A DETAIL
C-00-4001 SCALE: NTS

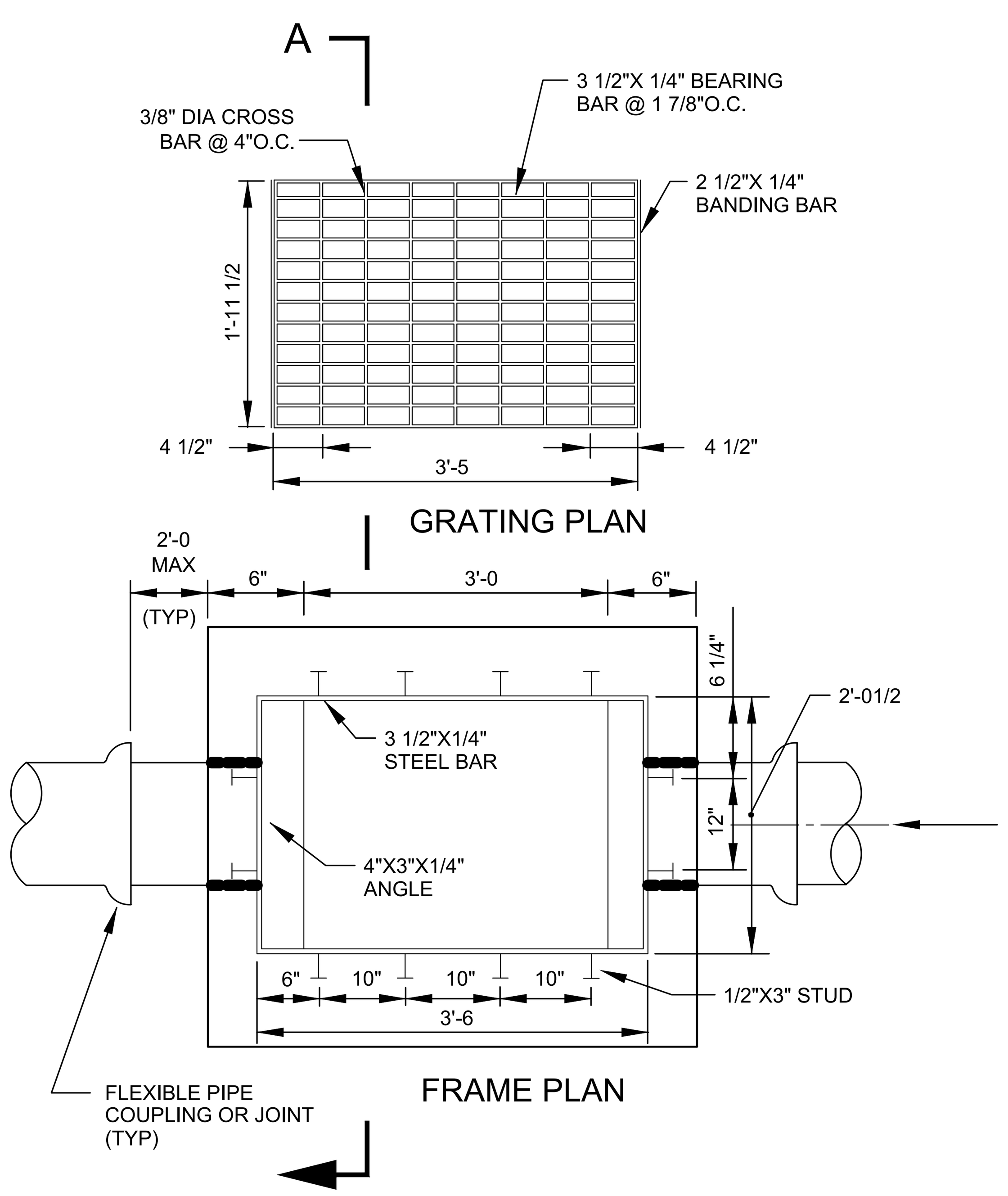


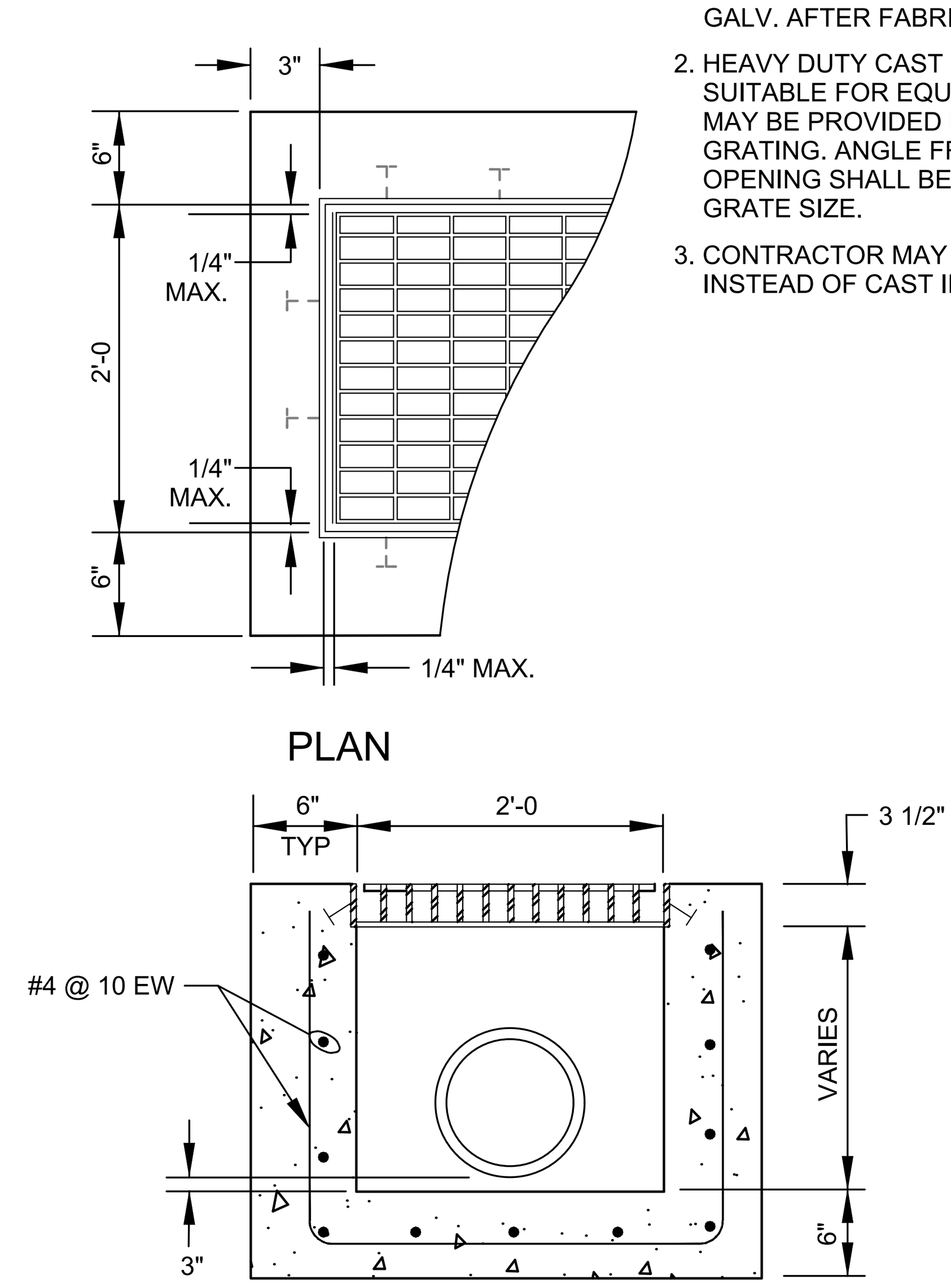
GRAVEL SURFACING
B DETAIL
C-00-2001 SCALE: NTS



NOTE:
PROVIDE POST CAP WHERE ENTENSION ARM WITH BARBED WIRE IS NOT SPECIFIED.

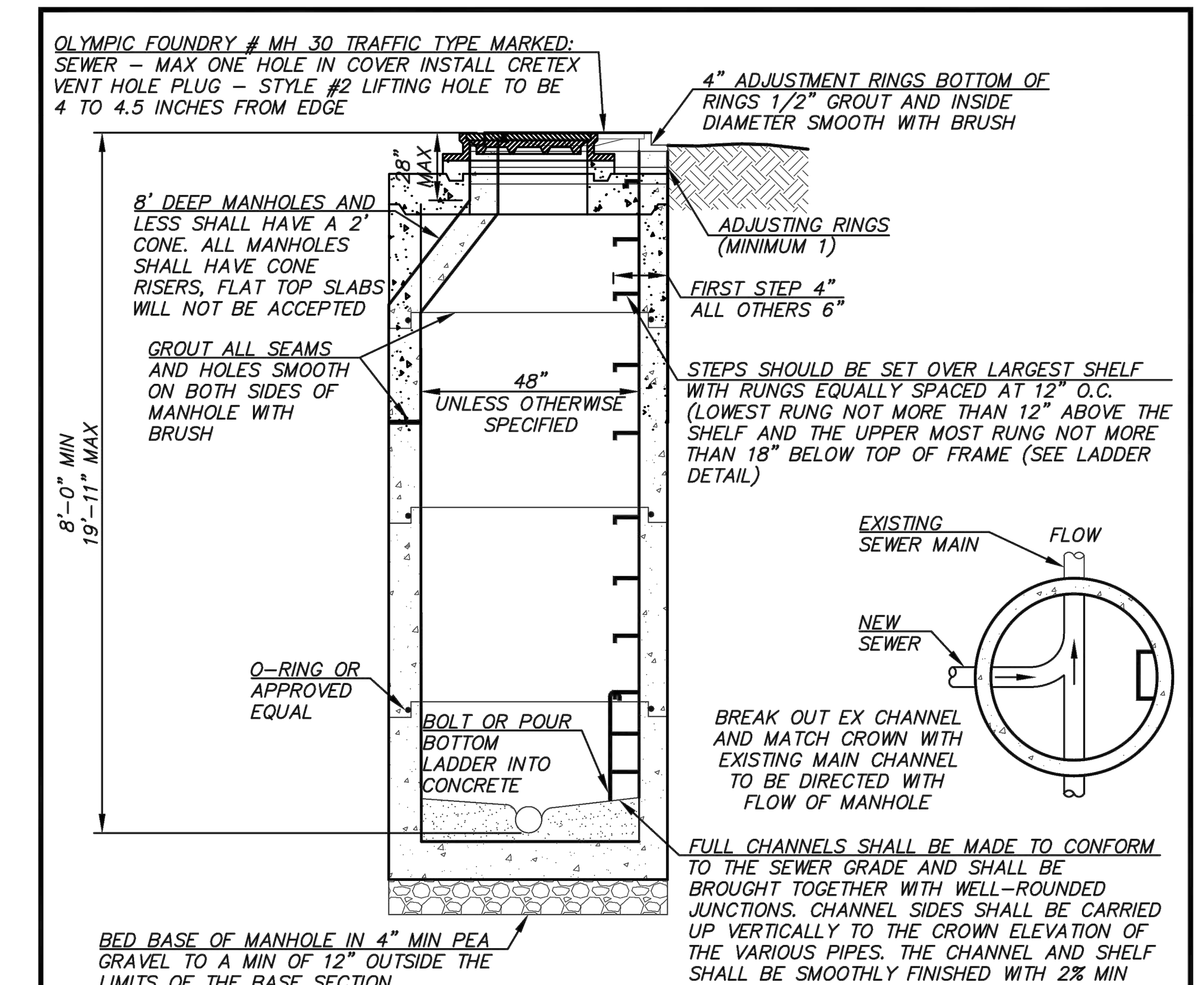
CHAIN LINK FENCE AND GATE
D DETAIL
C-00-2001 SCALE: NTS





NOTES:
1. FABRICATED STEEL FRAME AND GRATING SHALL BE HOT DIPPED GALV. AFTER FABRICATION.
2. HEAVY DUTY CAST IRON GRATING SUITABLE FOR EQUIVALENT LOADING MAY BE PROVIDED INSTEAD OF STEEL GRATING. ANGLE FRAME AND CLEAR OPENING SHALL BE SIZED TO FIT GRATE SIZE.
3. CONTRACTOR MAY USE PRECAST INLETS INSTEAD OF CAST IN PLACE INLETS.

CATCH BASIN TYPE 1
C DETAIL
C-00-4001 SCALE: NTS



NOTES

1. *BACKFILLING AND MECHANICAL COMPACTION SHALL BE PERFORMED CAREFULLY SO THAT NO DAMAGE IS IS DONE TO THE PIPE OR TO ITS ALIGNMENT. THE DISTRICT MAY DIRECT THE CONTRACTOR TO USE SPECIAL BACKFILL TECHNIQUES WHEN THE DISTRICT DEEMS IT NECESSARY. COMPACTION IS TO MEET KING COUNTY REQUIREMENTS.*
2. *MANHOLES SET IN PAVED STREETS OR OTHER PAVED AREAS SHALL BE SET TO FINISHED GRADE OF THE PAVING, AND WHEN REQUIRED THE MANHOLE FRAME SHALL BE TILTED TO CONFORM TO THE GRADE OF THE PAVED SURFACE. REMOVE ASPHALT FROM COVER AFTER PAVING.*
3. *ASPHALT PATCH WILL BE REQUIRED ON ALL MANHOLES INSTALLED ON THE SHOULDER OF THE ROADWAY. (SEE SANITARY MANHOLE ASPHALT PATCH DETAIL).*
4. *IF MANHOLE IS INSTALLED ON UNIMPROVED GROUND SET MANHOLE TOP 6" ABOVE GRADE WITH LOCKING COVER AND FRAME (OLYMPIC FOUNDRY #MH 30 D/T) AND ASPHALT PATCH (SEE MANHOLE ASPHALT ASPHALT COLLAR DETAIL).*
5. *BASE SECTION OPENINGS TO RECEIVE PIPE SHALL BE CIRCULAR CORE-DRILLED OR KNOCK-OUTS. KOR-N-SEAL CONNECTOR REQUIRED.*
6. *HORIZONTAL DISTANCE BETWEEN MANHOLES SCALED FROM WORKSHEETS AND ROADWAY PLAN AND PROFILES. ACTUAL DISTANCES TO THE COMPUTED AT TIME OF STAKING.*
7. *MANHOLES BETWEEN 6-FEET AND 8-FEET DEEP REQUIRE WRITTEN DISTRICT APPROVAL. MANHOLES LESS THAN 6 FEET DEEP ARE NOT ALLOWED.*
8. *MANHOLES 20' AND GREATER IN DEPTH SHALL BE 60" DIAMETER. FOR PIPE 15" OR GREATER DIAMETER, MANHOLES SHALL BE 72" DIAMETER.*

STANDARD SANITARY MANHOLE *REV. 10/19/17*

NOTE:
1. IN-LINE ELASTOMERIC CHECK VALVES INSTALLED IMMEDIATE INSIDE MH PER SECTION 40 05 65.35 AND AS SHOWN ON PLANS.

E DETAIL
C-00-4001 SCALE: NTS

Brown AND Caldwell

90% DESIGN

Sammamish Plateau Water

Sammamish Plateau Water PFAS Project

REVISIONS

REV	DATE	DESCRIPTION

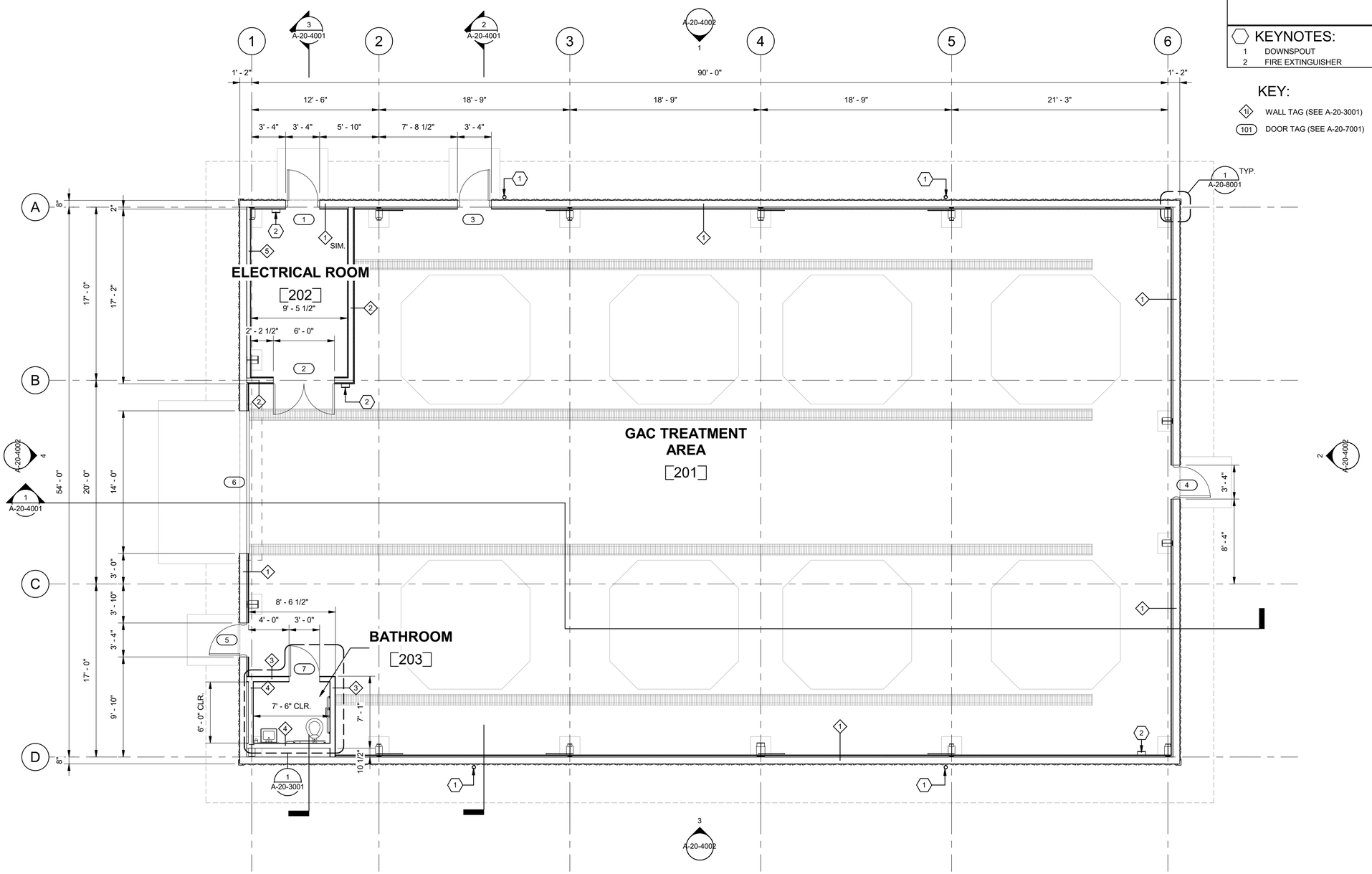
LINE IS 2 INCHES AT FULL SIZE

DESIGNED: K.WEBER
DRAWN: K.TOLLE
CHECKED:
CHECKED:
APPROVED:
FILENAME C-00-8007.dwg
BC PROJECT NUMBER 155452
CLIENT PROJECT NUMBER

CIVIL

CIVIL DETAILS 1

DRAWING NUMBER
C-00-8007
SHEET NUMBER
OF



FLOOR PLAN

SCALE: 3/16" = 1'-0"

PLAN NORTH

GENERAL NOTES:

1. CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS.
2. ALL DIMENSIONS ARE TAKEN TO OUTER FACE OF WALL AND ROUGH OPENINGS.

KEYNOTES:

1 DOWNSPOUT
2 FIRE EXTINGUISHER

KEY:

1 WALL TAG (SEE A-20-3001)
101 DOOR TAG (SEE A-20-7001)

Brown AND Caldwell

WAGNER ARCHITECTS PLANNERS

90% DESIGN

Sammamish Plateau Water

Sammamish Plateau Water
PFAS Design

REVISIONS

REV	DATE	DESCRIPTION

LINE IS 2 INCHES AT FULL SIZE

DESIGNED: G. SOMERS
DRAWN: R. RIETHMILLER
CHECKED: R. WAGNER
CHECKED:
APPROVED:

FILE NAME

BC PROJECT NUMBER
155452
CLIENT PROJECT NUMBER

ARCHITECTURAL

GAC BUILDING FLOOR PLAN

DRAWING NUMBER
A-20-1001

SHEET NUMBER
OF

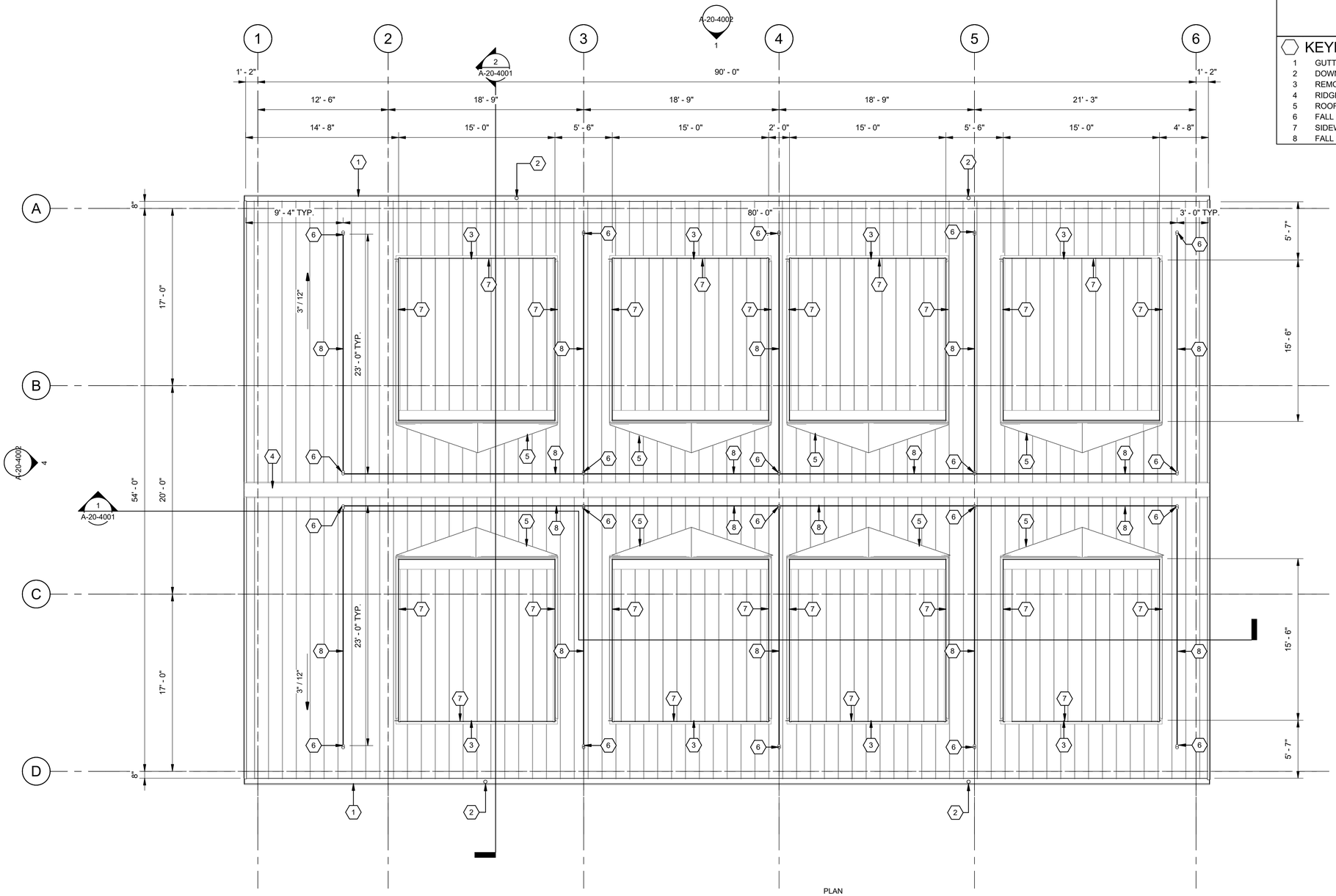
Plot Date: 12/15/2020 4:34:03 PM Path: BIM 360://155452 - Sammamish Plateau PFAS Design/155452-A-20V19.rvt

GENERAL NOTES:

1. CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS.
2. ALL DIMENSIONS ARE TAKEN TO OUTER FACE OF WALL AND ROUGH OPENINGS.

KEYNOTES:

1	GUTTER
2	DOWNSPOUT
3	REMOVABLE ROOF PANEL
4	RIDGE CAP
5	ROOF CRICKET, SEE DETAIL 4/A-20-8003
6	FALL RESTRAINT ANCHORS, SEE DETAIL 5/A-20-8003
7	SIDEWALL FLASHING, SEE DETAILS 1,2,3/A-20-8003
8	FALL RESTRAINT SYSTEM LIFELINE



ROOF PLAN

SCALE: 3/16" = 1'-0"

PLAN NORTH

Brown AND Caldwell

WAGNER ARCHITECTS ··PLANNERS

90% DESIGN

Sammamish Plateau Water

Sammamish Plateau Water
PFAS Design

REVISIONS

REV	DATE	DESCRIPTION

LINE IS 2 INCHES AT FULL SIZE

DESIGNED:	G. SOMERS
DRAWN:	R. RIETHMILLER
CHECKED:	R. WAGNER
CHECKED:	
APPROVED:	

FILE NAME

BC PROJECT NUMBER
155452

CLIENT PROJECT NUMBER

ARCHITECTURAL

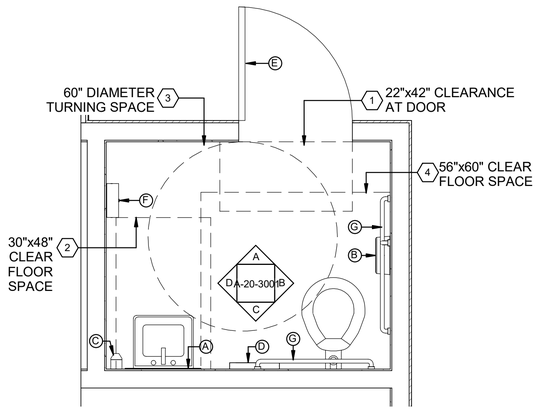
GAC BUILDING
ROOF PLAN

DRAWING NUMBER
A-20-1002

SHEET NUMBER
OF

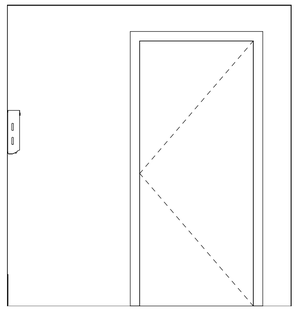
Plot Date: 12/15/2020 4:34:21 PM Path: BIM 360://155452 - Sammamish Plateau PFAS Design/155452-A-20V19.rvt

TOILET ACCESSORIES		
MARK	DESCRIPTION	MOUNTING HEIGHT
A	MIRROR	+40" A.F.F. TO BOTTOM OF REFLECTING SURFACE
B	S.M. TOILET PAPER DISPENSER	+18" A.F.F. TO POINT OF DISPENSING
C	S.M. SOAP DISPENSER	+44" MAX. TO POINT OF DISPENSING
D	S.M. TOILET SEAT COVER DISPENSER	15"- 48" TO POINT OF DISPENSING
E	COAT HOOK	+48" A.F.F. TO TOP OF COAT HOOK
F	S.M. PAPER TOWEL DISPENSER	+48" MAX. TO POINT OF DISPENSING
G	GRAB BARS	33"-36" A.F.F. TO TOP OF GRIPPING SURFACE (FOR HORIZONTAL BARS)



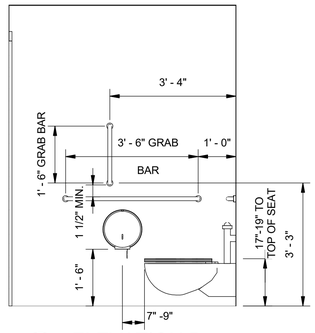
1 A-20-1001 ADA TOILET PLAN

SCALE: 1/2" = 1'-0"



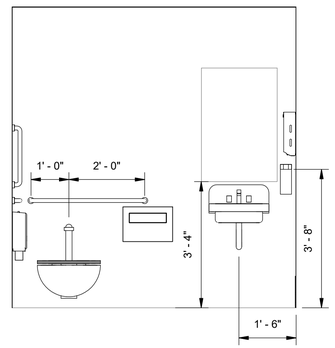
A A-20-3001 ELEVATION A

SCALE: 1/2" = 1'-0"



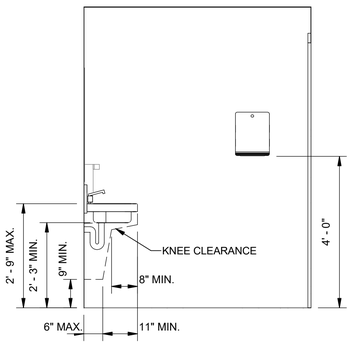
B A-20-3001 ELEVATION B

SCALE: 1/2" = 1'-0"



C A-20-3001 ELEVATION C

SCALE: 1/2" = 1'-0"



D A-20-3001 ELEVATION D

SCALE: 1/2" = 1'-0"

GENERAL NOTES FOR ADA ACCESSIBLE DESIGN:

1. TOILET ROOMS SHALL COMPLY WITH SECTION 603 OF THE 2010 ADA STANDARDS FOR ACCESSIBLE DESIGN.
2. GRAB BARS SHALL COMPLY WITH SECTIONS 604.5 AND 609 OF THE 2010 ADA STANDARDS FOR ACCESSIBLE DESIGN. THE SPACE BETWEEN THE WALL AND GRAB BAR SHALL BE 1 1/2". THE SPACE BETWEEN THE GRAB BAR AND PROJECTING OBJECTS BELOW AND AT ALL ENDS SHALL BE 1 1/2" MINIMUM. THE SPACE BETWEEN THE GRAB BAR AND PROJECTING OBJECTS ABOVE SHALL BE 12" MINIMUM.
3. ALL OPERATING MECHANISMS OR DISPENSING LOCATIONS MUST BE MOUNTED BETWEEN 15" AND 48" ABOVE FINISHED FLOOR. FOR AN UNOBSTRUCTED FORWARD APPROACH, WITHIN 44" IF OBSTRUCTED REACH DEPTH IS BETWEEN 20" AND 25", AND SHALL COMPLY WITH SECTION 308.2 OF THE 2010 ADA STANDARDS FOR ACCESSIBLE DESIGN.
4. MOUNT WATER CLOSET SO THAT THE CENTERLINE IS BETWEEN 16" & 18" FROM THE SIDE WALL, AND THE TOP OF SEAT IS BETWEEN 17" AND 19" ABOVE FINISHED FLOOR. WATER CLOSET MOUNT SHALL COMPLY WITH SECTIONS 604.2 (FOR LOCATION)AND 604.4 (FOR SEAT HEIGHT)OF THE 2010 ADA STANDARDS FOR ACCESSIBLE DESIGN.
5. LAVATORY SHALL COMPLY WITH SECTION 606.3 OF THE 2010 ADA STANDARDS FOR ACCESSIBLE DESIGN. MOUNT LAVATORY SO THAT THE RIM IS 34" ABOVE FINISHED FLOOR MAXIMUM.
6. WATER SUPPLY AND DRAIN PIPES UNDER LAVATORIES SHALL BE INSULATED OR OTHERWISE CONFIGURED TO PROTECT AGAINST CONTACT. THERE SHALL BE NO SHARP OR ABRASIVE SURFACES UNDER LAVATORY SINKS.
7. PROVIDE AN ADA SIGN AT TOILET THAT COMPLIES WITH SECTION 703 OF THE 2010 ADA STANDARDS FOR ACCESSIBLE DESIGN.
8. ALL COMMON USE CONTROLS INCLUDING LIGHT SWITCHES, SECURITY CONTROLS, ELECTRICAL CONVENIENCE OUTLETS, AND OPERABLE PARTS OF ACCESSIBLE ELEMENTS MUST BE WITHIN REACH RANGES SPECIFIED IN SECTIONS 308 AND 309 OF THE 2010 ADA STANDARDS FOR ACCESSIBLE DESIGN. OPERABLE PARTS ARE TO BE OPERABLE WITH ONE HAND AND SHALL NOT REQUIRE TIGHT PINCHING OR GRASPING OR TWISTING OF THE WRIST PER SECTION 309.4 OF THE 2010 ADA STANDARDS FOR ACCESSIBLE DESIGN..

WALL TYPES

WALL TYPE 1

SIDE 1 (INTERIOR)

SIDE 2 (EXTERIOR)

FRAME	SIZE	GAUGE	SPACING	HEIGHT (A.F.F.)
METAL	8"		5'-0" O.C. MAX.	ROOF

SIDE 1 INTERIOR

# LAYERS	FUNCTION	MATERIAL	THICKNESS	HEIGHT (A.F.F.)	SPACING
1	WAINSCOT	FRWP	N/A	4'-0"	
1	INT. WALL	PLYWOOD	3/4"	* 8'-10"	
1	FURRING	METAL HAT CHANNELS	1 1/2"	* 8'-10"	16" O.C.

***NOTE:** HEIGHT OF PLYWOOD AND METAL HAT CHANNELS AT ELECTRICAL ROOM (NORTH WALL) IS 14'-0" A.F.F.

SIDE 2 EXTERIOR

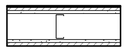
# LAYERS	FUNCTION	MATERIAL	THICKNESS	HEIGHT (A.F.F.)	SPACING
1	SIDING 'TYPE A'	METAL	N/A	ROOF	
1	SIDING 'TYPE B'	METAL	N/A	18'-0"	

INSULATION

TYPE	R-VALUE
BANDED LINER	R-19 CONTINUOUS

WALL TYPE 2
1-HOUR RATED

SIDE 1
ROOM 201



SIDE 2
ROOM 202

FRAME	SIZE	GAUGE	SPACING	HEIGHT (A.F.F.)
METAL	5 1/2"		16" O.C.	CEILING

SIDE 1

# LAYERS	FUNCTION	MATERIAL	THICKNESS	HEIGHT (A.F.F.)	SPACING
1	WAINSCOT	FRWP	N/A	4'-0"	
1	INT. WALL	PLYWOOD	3/4"	14'-10"	
1	INT. WALL	TYPE X GWB	5/8"		

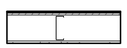
SIDE 2

# LAYERS	FUNCTION	MATERIAL	THICKNESS	HEIGHT (A.F.F.)	SPACING
1	INT. WALL	FIRE-RATED PLYWOOD	3/4"	14'-0"	
1	INT. WALL	TYPE X GWB	5/8"	14'-0"	

NOTE: ALL JOINTS AND GAPS IN WALL/CEILING ASSEMBLY SHALL BE FILLED WITH 1-HOUR RATED FIRESTOPPING

WALL TYPE 3

SIDE 1
ROOM 201



SIDE 2
ROOM 203

FRAME	SIZE	GAUGE	SPACING	HEIGHT (A.F.F.)
METAL	5 1/2"		16" O.C.	CEILING

SIDE 1

# LAYERS	FUNCTION	MATERIAL	THICKNESS	HEIGHT (A.F.F.)	SPACING
1	WAINSCOT	FRWP	N/A	4'-0"	
1	INT. WALL	PLYWOOD	3/4"	8'10"	

SIDE 2

# LAYERS	FUNCTION	MATERIAL	THICKNESS	HEIGHT (A.F.F.)	SPACING
1	INT. WALL	GWB	5/8"	8'-0"	

WALL TYPE 4

SIDE 1
ROOM 203

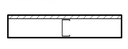
FRAME	SIZE	GAUGE	SPACING	HEIGHT (A.F.F.)
METAL	5 1/2"		16" O.C.	CEILING

SIDE 1

# LAYERS	FUNCTION	MATERIAL	THICKNESS	HEIGHT (A.F.F.)	SPACING
1	INT. WALL	GWB	5/8"	8'-0"	

WALL TYPE 5

SIDE 1
ROOM 202



FRAME	SIZE	GAUGE	SPACING	HEIGHT (A.F.F.)
METAL	4"		16" O.C.	CEILING

SIDE 1

# LAYERS	FUNCTION	MATERIAL	THICKNESS	HEIGHT (A.F.F.)	SPACING
1	INT. WALL	PLYWOOD	3/4"	14'-0"	

CEILING TYPES

CEILING TYPE A

SIDE 1

SIDE 2 (ROOM 203)

FRAME	SIZE	GAUGE	SPACING	HEIGHT (A.F.F.)
METAL	10"	12 GA	1-0" O.C. MAX.	14'-0"

SIDE 1

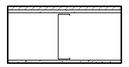
# LAYERS	MATERIAL	THICKNESS
1	PLYWOOD	3/4"

SIDE 2

# LAYERS	MATERIAL	THICKNESS
1	TYPE X GWB	5/8"

CEILING TYPE B
1-HOUR RATED

SIDE 1



SIDE 2
ROOM 202

FRAME	SIZE	GAUGE	SPACING	HEIGHT (A.F.F.)
METAL	10"	12 GA	1-0" O.C. MAX.	8'-0"

SIDE 1

# LAYERS	MATERIAL	THICKNESS
1	PLYWOOD	3/4"
1	TYPE X GWB	5/8"

SIDE 2

# LAYERS	MATERIAL	THICKNESS
1	TYPE X GWB	5/8"

NOTE: ALL JOINTS AND GAPS IN WALL/CEILING ASSEMBLY SHALL BE FILLED WITH 1-HOUR RATED FIRESTOPPING

GENERAL NOTES:

1. CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS.
2. ALL DIMENSIONS ARE TAKEN TO OUTER FACE OF WALL AND ROUGH OPENINGS.

KEYNOTES:

1. MANEUVERING CLEARANCE AT DOOR TO COMPLY WITH SECTION 404.2.4. OF THE 2010 ADA STANDARDS FOR ACCESSIBLE DESIGN.
2. CLEAR FLOOR SPACE AT THE LAVATORY SHALL COMPLY WITH SECTION 606.2 OF THE 2010 ADA STANDARDS FOR ACCESSIBLE DESIGN.
3. TURNING SPACE SHALL COMPLY WITH SECTIONS 304 AND 603.2.1 OF THE 2010 ADA STANDARDS FOR ACCESSIBLE DESIGN.
4. CLEARANCE AROUND A WATER CLOSET SHALL COMPLY WITH SECTION 604.3.1 OF THE 2010 ADA STANDARDS FOR ACCESSIBLE DESIGN.

Brown AND Caldwell

WAGNER ARCHITECTS ·PLANNERS

90% DESIGN

Sammamish Plateau Water

Sammamish Plateau Water
PFAS Design

REVISIONS

REV	DATE	DESCRIPTION

LINE IS 2 INCHES AT FULL SIZE

DESIGNED: G.SOMERS
DRAWN: R.RIETHMILLER
CHECKED: R.WAGNER
CHECKED:
APPROVED: Approver

FILE NAME

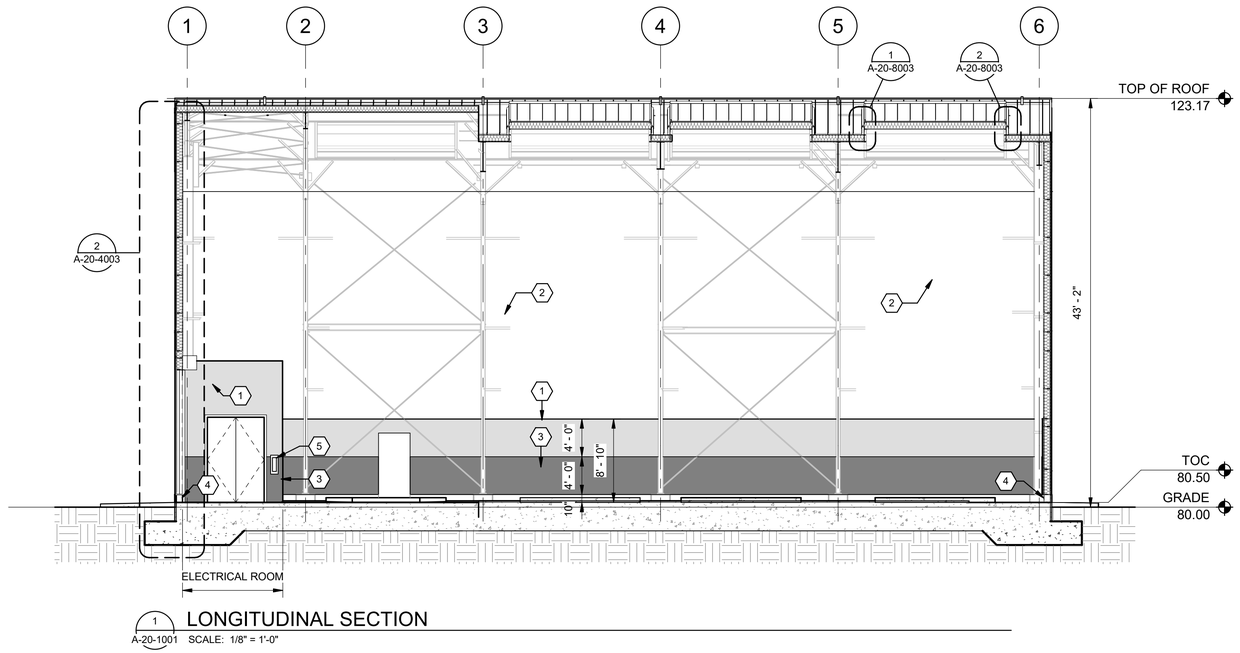
BC PROJECT NUMBER
155452
CLIENT PROJECT NUMBER

ARCHITECTURAL

GAC BUILDING
ADA TOILET PLAN / ELEVATIONS AND WALL TYPES

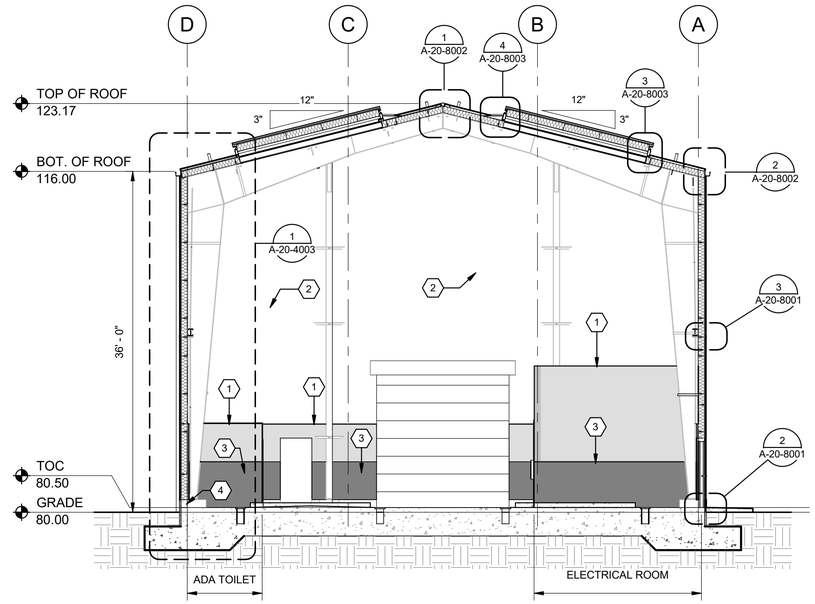
DRAWING NUMBER
A-20-3001
SHEET NUMBER
OF

Plot Date: 12/15/2020 4:34:33 PM Path: BIM 360://155452 - Sammamish Plateau PFAS Design/155452-A-20V19.rvt



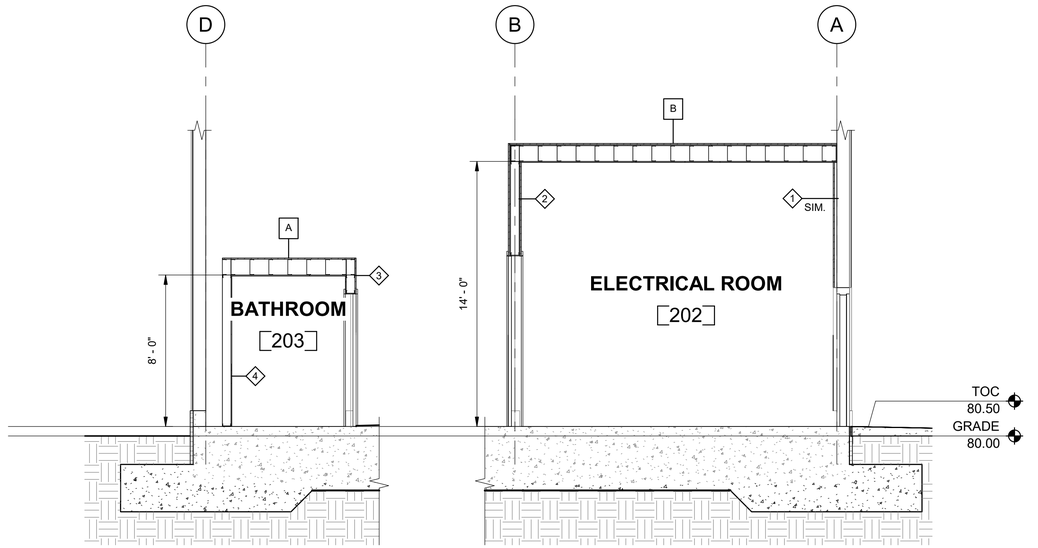
1 A-20-1001 LONGITUDINAL SECTION

SCALE: 1/8" = 1'-0"



2 A-20-1001 CROSS SECTION

SCALE: 1/8" = 1'-0"



3 A-20-1001 SECTION AT ADA TOILET AND ELECTRICAL ROOM

SCALE: 1/4" = 1'-0"

GENERAL NOTES:

1. CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS.
2. ALL DIMENSIONS ARE TAKEN TO OUTER FACE OF WALL AND ROUGH OPENINGS.

KEYNOTES:

1	PLYWOOD
2	VINYL CLAD INSULATION
3	FIBERGLASS REINFORCED PLASTIC WALL PANEL
4	CONCRETE CURB
5	FIRE EXTINGUISHER

HATCH KEY:

PLYWOOD

FRWP

KEY:

1 WALL TAG (SEE A-20-3001)

1i CEILING TAG (SEE A-20-3001)

Brown AND Caldwell

WAGNER ARCHITECTS ··PLANNERS

90% DESIGN

Sammamish Plateau Water

Sammamish Plateau Water
PFAS Design

REVISIONS

REV	DATE	DESCRIPTION

LINE IS 2 INCHES AT FULL SIZE

DESIGNED: G. SOMERS
DRAWN: R. RIETHMILLER
CHECKED: R. WAGNER
CHECKED:
APPROVED:

FILE NAME

BC PROJECT NUMBER
155452
CLIENT PROJECT NUMBER

ARCHITECTURAL

GAC BUILDING
BUILDING SECTIONS AND INTERIOR ELEVATIONS

DRAWING NUMBER
A-20-4001

SHEET NUMBER
OF

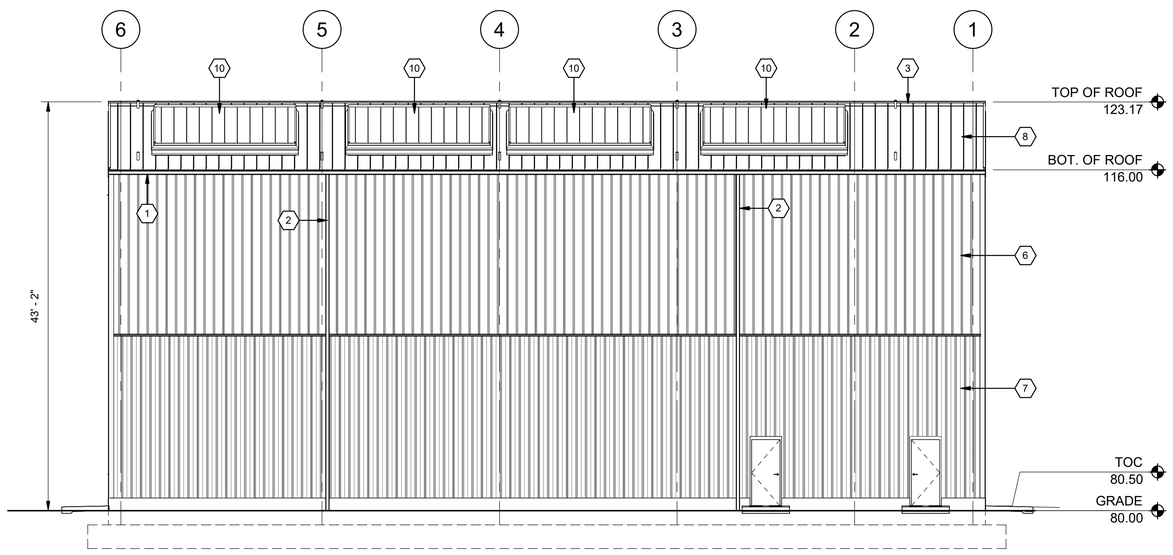
Plot Date: 12/15/2020 4:34:47 PM Path: BIM 360://155452 - Sammamish Plateau PFAS Design/155452-A-20V19.rvt

GENERAL NOTES:

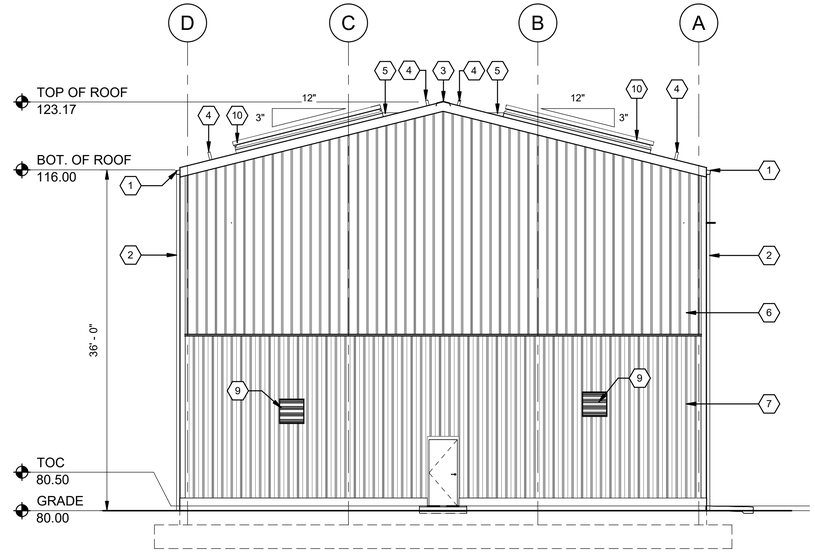
1. CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS.

KEYNOTES:

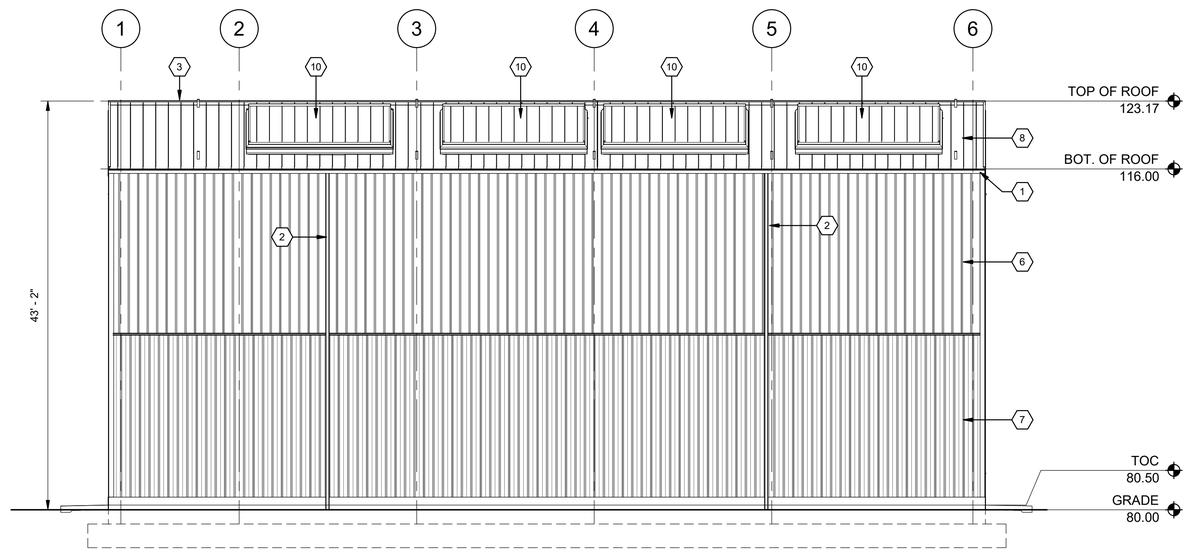
1	GUTTER
2	DOWNSPOUT
3	RIDGE CAP
4	FALL RESTRAINT ANCHORS, SEE DETAIL 5/A-20-8003
5	ROOF CRICKET, SEE DETAIL 4/A-20-8003
6	VERTICAL METAL SIDING 'TYPE A'
7	VERTICAL METAL SIDING 'TYPE B'
8	STANDING SEAM METAL ROOFING
9	LOUVER, SEE MECHANICAL
10	REMOVABLE ROOF PANEL



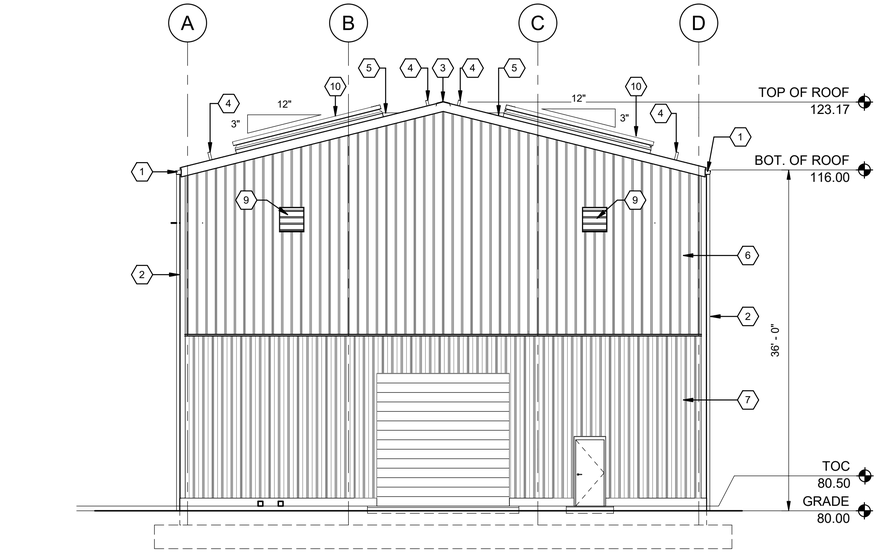
1 A-20-1001 NORTH ELEVATION
SCALE: 1/8" = 1'-0"



2 A-20-1001 EAST ELEVATION
SCALE: 1/8" = 1'-0"



3 A-20-1001 SOUTH ELEVATION
SCALE: 1/8" = 1'-0"



4 A-20-1001 WEST ELEVATION
SCALE: 1/8" = 1'-0"

Brown AND Caldwell

WAGNER ARCHITECTS ··PLANNERS

90% DESIGN

Sammamish Plateau Water

Sammamish Plateau Water
PFAS Design

REVISIONS

REV	DATE	DESCRIPTION

LINE IS 2 INCHES AT FULL SIZE

DESIGNED: G. SOMERS
DRAWN: R. RIETHMILLER
CHECKED: R. WAGNER
CHECKED:
APPROVED:

FILE NAME

BC PROJECT NUMBER
155452
CLIENT PROJECT NUMBER

ARCHITECTURAL

GAC BUILDING EXTERIOR ELEVATIONS

DRAWING NUMBER
A-20-4002
SHEET NUMBER
OF

Plot Date: 12/15/2020 4:35:01 PM Path: BIM 360://155452 - Sammamish Plateau PFAS Design/155452-A-20V19.rvt

2 WALL SECTION AT GRID LINE 1
A-20-4001 SCALE: 3/4" = 1'-0"

1 WALL SECTION AT GRID LINE D
A-20-4001 SCALE: 3/4" = 1'-0"

Brown AND Caldwell

WAGNER ARCHITECTS ··PLANNERS

90% DESIGN

Sammamish Plateau Water

Sammamish Plateau Water
PFAS Design

REVISIONS

REV	DATE	DESCRIPTION

LINE IS 2 INCHES AT FULL SIZE

DESIGNED: G. SOMERS
DRAWN: R. RIETHMILLER
CHECKED: R. WAGNER
CHECKED:
APPROVED: Approver
FILE NAME
BC PROJECT NUMBER 155452
CLIENT PROJECT NUMBER

ARCHITECTURAL

GAC BUILDING WALL SECTIONS

DRAWING NUMBER
A-20-4003
SHEET NUMBER
OF

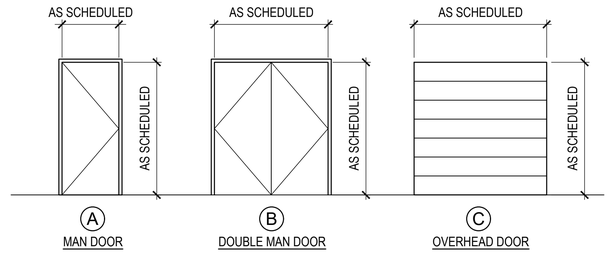
Plot Date: 12/15/2020 4:35:35 PM Path: BIM 360://155452 - Sammamish Plateau PFAS Design/155452-A-20V19.rvt

DOOR SCHEDULE

TAG#	NAME/ LOCATION	TYPE	SIZE (INCHES)			MAT	FIN	GLAZ	THERMAL		FRAME		HDWR GROUP	RATING (MIN)	EXIT DEVICE	DETAILS			ELEC	SIGN	REMARKS:
			WIDTH	HEIGHT	THICK				MIN. U	R-VALUE MAX	MAT	FIN				HEADER	JAMB	THRESHOLD			
1	ELECTRICAL ROOM	A	36	84	1-3/4"	STL	PTD	-	0.37	-	STL	PTD	1	45	Y	4/A-20-8004	3/A-20-8004	5/A-20-8004	Y	-	-
2	ELECTRICAL ROOM	B	72	108	1-3/4"	STL	PTD	-	-	-	STL	PTD	2	45	Y	2/A-20-8004	1/A-20-8004		Y	-	-
3	GAC TREATMENT AREA	A	36	84	1-3/4"	STL	PTD	-	0.37	-	STL	PTD	3	-	-	4/A-20-8004	3/A-20-8004	5/A-20-8004	Y	-	-
4	GAC TREATMENT AREA	A	36	84	1-3/4"	STL	PTD	-	0.37	-	STL	PTD	3	-	-	4/A-20-8004	3/A-20-8004	5/A-20-8004	Y	-	-
5	GAC TREATMENT AREA	A	36	84	1-3/4"	STL	PTD	-	0.37	-	STL	PTD	3	-	-	4/A-20-8004	3/A-20-8004	5/A-20-8004	Y	-	-
6	GAC TREATMENT AREA	C	168	168		SST	FAC	-	-	4.75	STL	PTD	5	-	-	6/A-20-8004	7/A-20-8004		-	-	-
7	BATHROOM	A	42	84	1-3/4"	STL	PTD	-	-	-	STL	PTD	4	-	-	2/A-20-8004	1/A-20-8004		-	Y	ADA SIGNAGE
NOTE: VERIFY ALL ROUGH OPENING SIZES IN NEW AND EXISTING WALLS																					

Abbreviations:

ELEC	Electrical	FAC	Factory	FIN	Finish	GLAZ	Glazing	MAT	Material
PTD	Painted	SQ FT	Square Feet	SST	Stainless Steel	STL	Steel	Y	YES

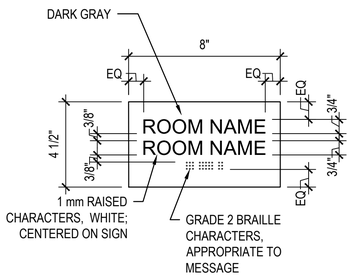


FINISH SCHEDULE

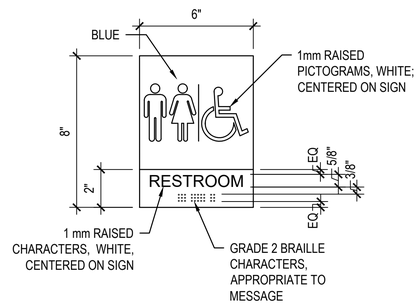
ROOM #	ROOM NAME	FLOOR		WALLS												CEILING			REMARKS
				NORTH			EAST			SOUTH			WEST						
		MAT	FIN	MAT	FIN	WAINSCOT	MAT	FIN	WAINSCOT	MAT	FIN	WAINSCOT	MAT	FIN	WAINSCOT	MAT	FIN	HEIGHT	
201	GAC TREATMENT AREA	CONC	PTD	PLY	PTD	FRWP	PLY	PTD	FRWP	PLY	PTD	FRWP	PLY	PTD	FRWP	VINYL			PLYWOOD 8' HT, FRWP 4' HT
202	ELECTRICAL ROOM	CONC	PTD	PLY	PTD	-	PLY	PTD	-	PLY	PTD	-	PLY	PTD	-	GWB		14'-0"	
203	BATHROOM	CONC	PTD	GWB	PTD	-	GWB	PTD	-	GWB	PTD	-	GWB	PTD	-	GWB		8'-0"	

Abbreviations:

ADA	Accessibility Guidelines	FIN	Finish	MAT	Material						
CLR	Clear	FRWP	Fiberglass Reinforced Wall Panel	PLY	Plywood						
CONC	Concrete	GWB	Gypsum Wall Board	PTD	Painted						



TYPE A



TYPE B

SIGNAGE SCHEDULE

ROOM #	ROOM NAME	AT DOOR	SIGN TYPE	MESSAGE	NOTES
202	ELECTRICAL ROOM	1	A	ELECTRICAL ROOM	
202	ELECTRICAL ROOM	2	A	ELECTRICAL ROOM	
202	ELECTRICAL ROOM		A	NO STORAGE ON CEILING PLATFORM	BRAILLE OMITTED, LOCATE AT OWNER'S DIRECTION
203	BATHROOM	7	B	RESTROOM	
203	BATHROOM		A	NO STORAGE ON CEILING PLATFORM	BRAILLE OMITTED, LOCATE AT OWNER'S DIRECTION

Brown AND Caldwell

WAGNER ARCHITECTS ··PLANNERS

90% DESIGN

Sammamish Plateau Water

Sammamish Plateau Water PFAS Project

REVISIONS

REV	DATE	DESCRIPTION

LINE IS 2 INCHES AT FULL SIZE

DESIGNED: G. SOMERS
DRAWN: A. PURNAPUSPITA
CHECKED: R. WAGNER
CHECKED: ##########
APPROVED: ########

FILENAME
A-20-7001 SCHEDULES.DWG

BC PROJECT NUMBER
155452

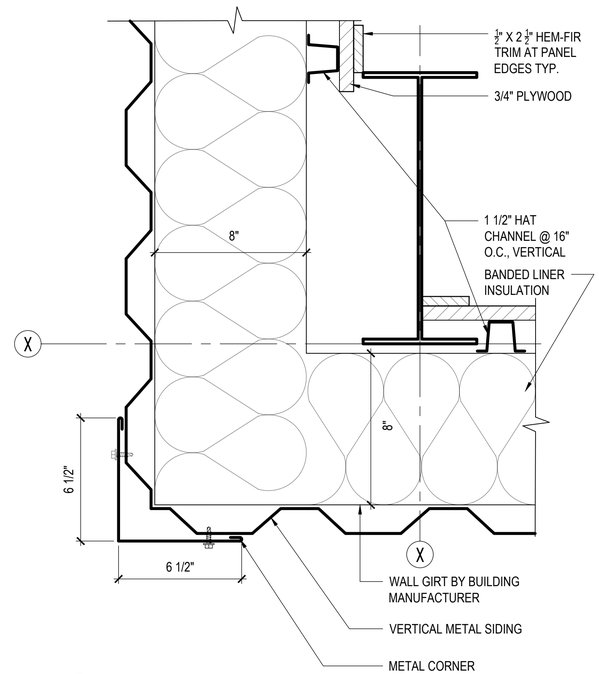
CLIENT PROJECT NUMBER

ARCHITECTURAL

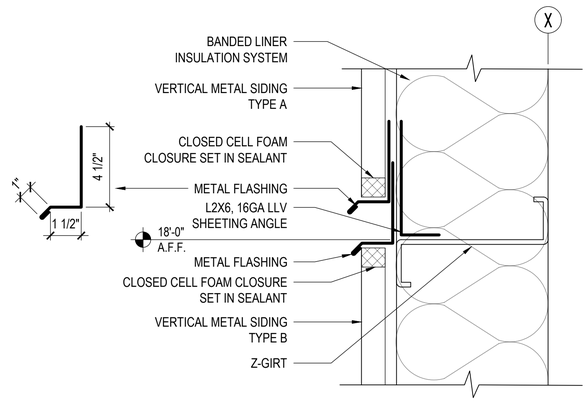
GAC BUILDING SCHEDULES

DRAWING NUMBER
A-20-7001

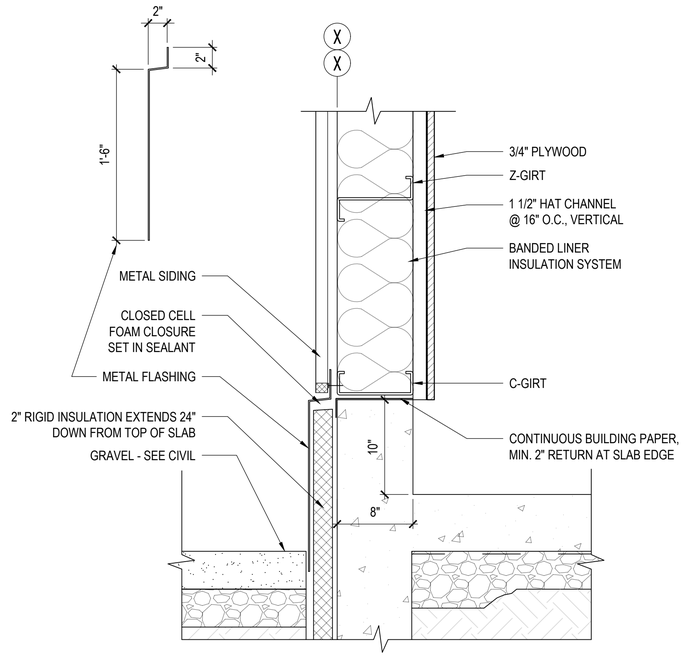
SHEET NUMBER
OF



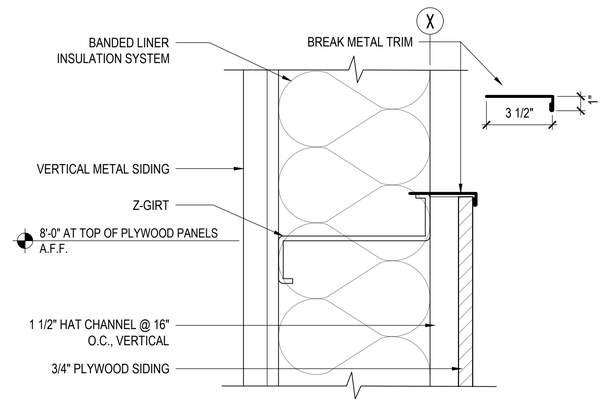
1 WALL CORNER PLAN DETAIL
SCALE: 3" = 1'-0"



3 WALL FLASHING DETAIL
SCALE: 3" = 1'-0"



2 WALL BASE DETAIL
SCALE: 1 1/2" = 1'-0"



4 WALL FLASHING DETAIL
SCALE: 3" = 1'-0"

Brown AND Caldwell

WAGNER ARCHITECTS ··PLANNERS

90% DESIGN

Sammamish Plateau Water

Sammamish Plateau Water PFAS Project

REVISIONS

REV	DATE	DESCRIPTION

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DESIGNED: G. SOMERS
DRAWN: A. PURNAPUSPITA
CHECKED: R. WAGNER
CHECKED: ##########
APPROVED: #########

FILENAME
A-20-8001 WALL DETAILS.DWG

BC PROJECT NUMBER
155452

CLIENT PROJECT NUMBER

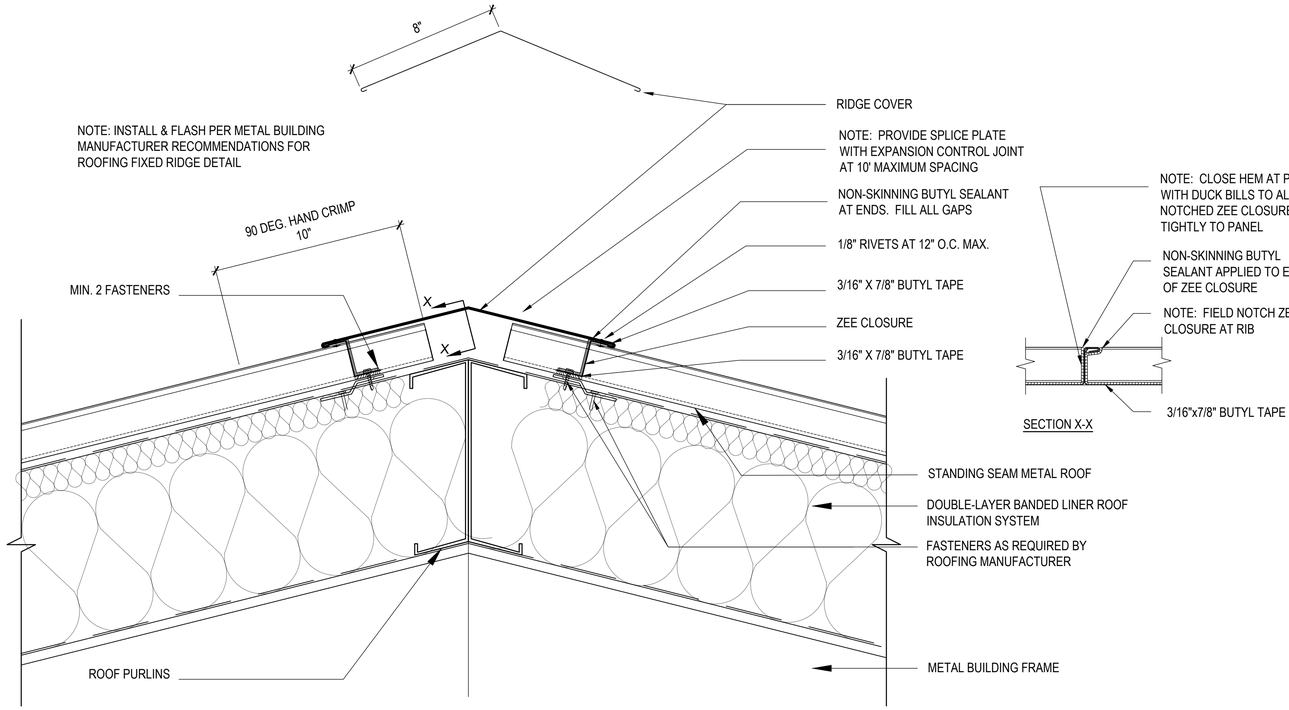
ARCHITECTURAL

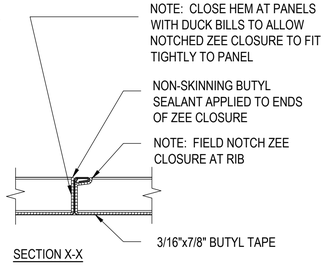
GAC BUILDING WALL DETAILS

DRAWING NUMBER
A-20-8001

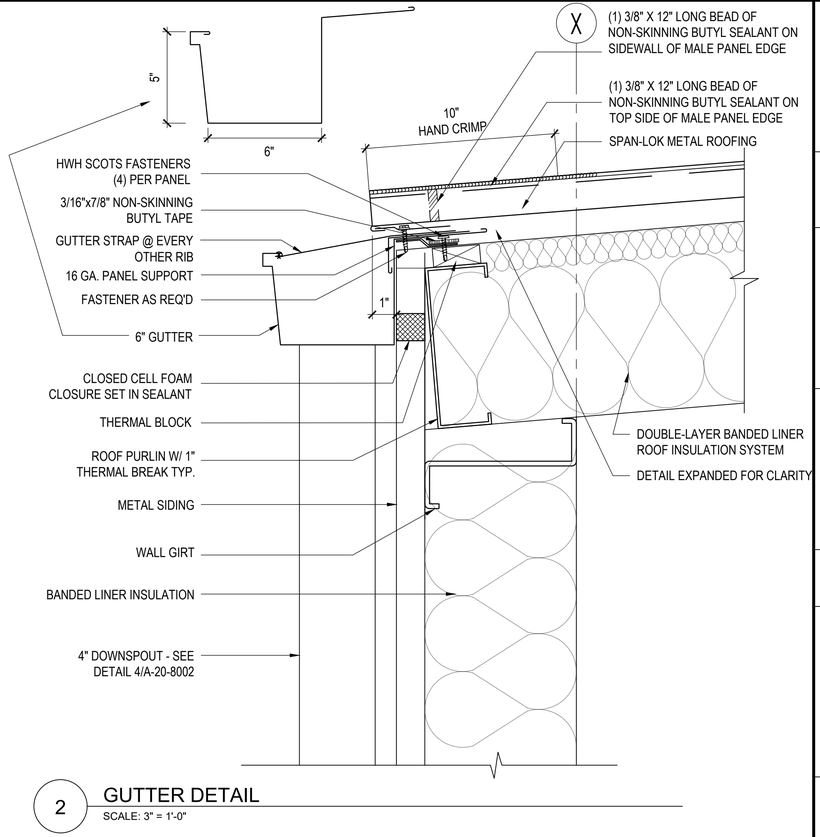
SHEET NUMBER
OF

Path: H:\CURRENT PROJECTS\BROWN AND CALDWELL PROJECTS\SAMMAMISH WATER DISTRICT 2020\DRAWINGS\AUTOCAD FILES FILENAME: A-20-8001 WALL DETAILS.DWG PLOT DATE: 12/16/2020 10:52 AM CAD USER: GREG SOMERS

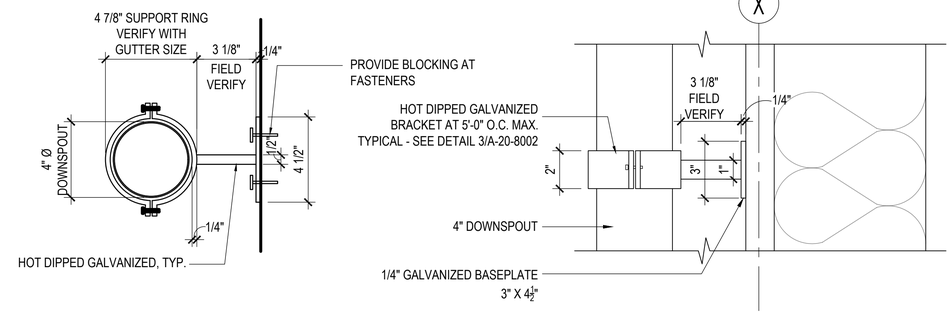




1 RIDGE DETAIL
SCALE: 3" = 1'-0"

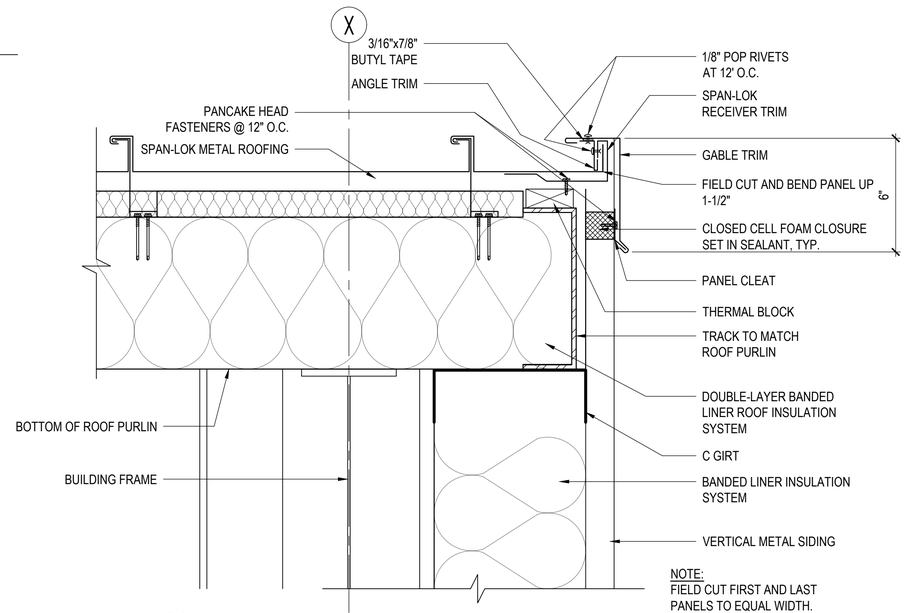


2 GUTTER DETAIL
SCALE: 3" = 1'-0"



3 4" DOWNSPOUT BRACKET DETAIL
SCALE: 3" = 1'-0"

4 4" DOWNSPOUT BRACKET DETAIL
SCALE: 3" = 1'-0"



5 RAKE DETAIL
SCALE: 3" = 1'-0"

Brown AND Caldwell

WAGNER ARCHITECTS ··PLANNERS

90% DESIGN

Sammamish Plateau Water

Sammamish Plateau Water PFAS Project

REVISIONS

REV	DATE	DESCRIPTION

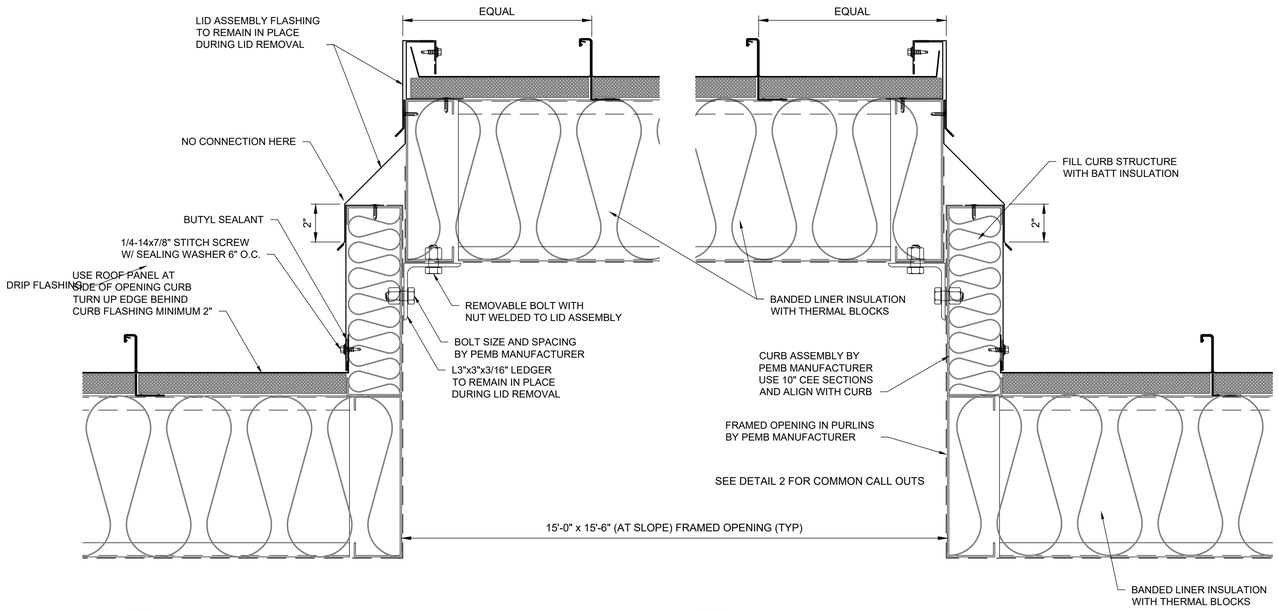
LINE IS 2 INCHES AT FULL SIZE

DESIGNED: G. SOMERS
DRAWN: A. PURNAPUSPITA
CHECKED: R. WAGNER
CHECKED: ##########
APPROVED: #########
FILENAME
A-20-8002 ROOF DETAILS.DWG
BC PROJECT NUMBER
155452
CLIENT PROJECT NUMBER

ARCHITECTURAL

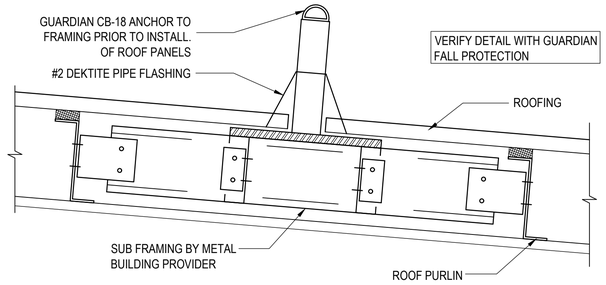
GAC BUILDING ROOF DETAILS

DRAWING NUMBER
A-20-8002
SHEET NUMBER
OF

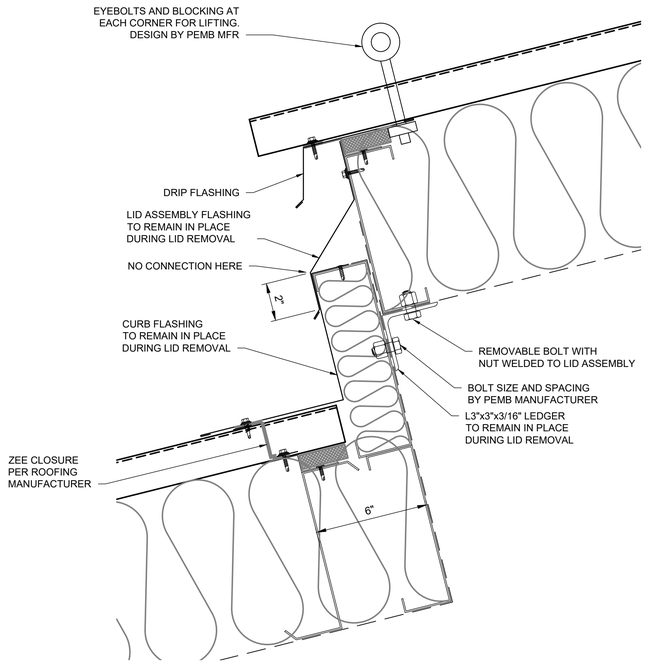


1 ROOF OPENING RAKE SIDE 1
SCALE: 3" = 1'-0"

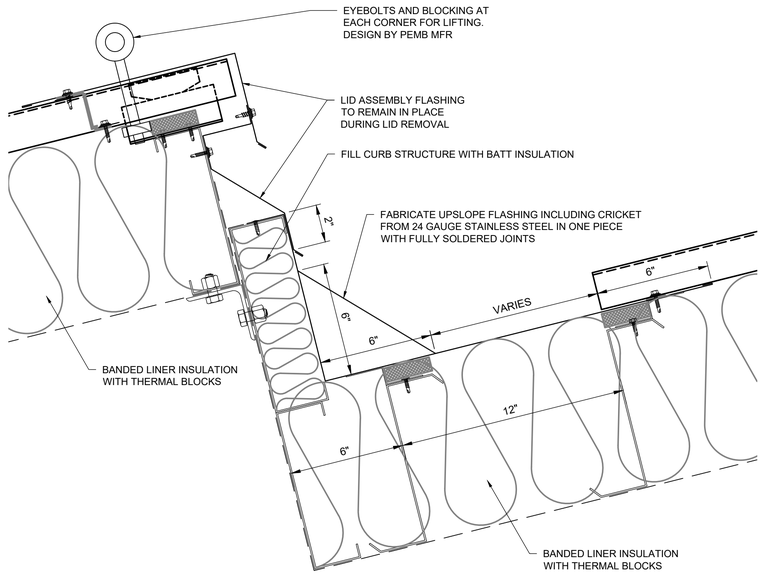
2 ROOF OPENING RAKE SIDE 2
SCALE: 3" = 1'-0"



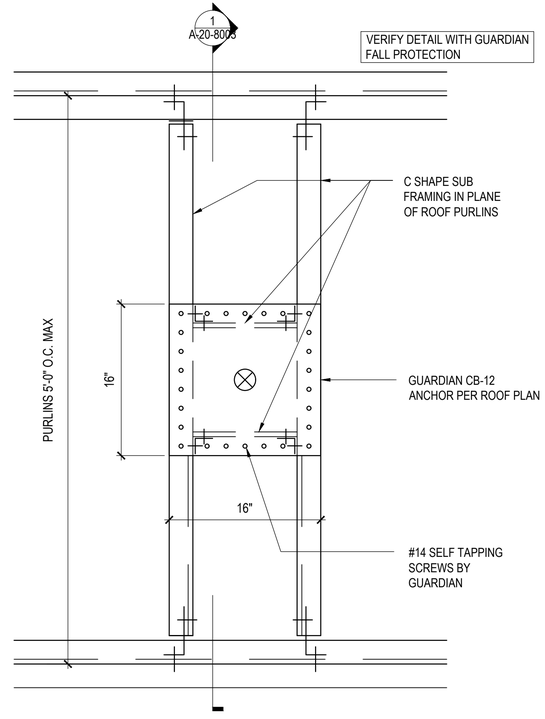
5 FALL RESTRAINT SECTION DETAIL @ METAL STRUCTURE
SCALE: 1 1/2" = 1'-0"



3 ROOF OPENING - DOWNSLOPE EDGE
SCALE: 3" = 1'-0"



4 ROOF OPENING - UPSLOPE EDGE
SCALE: 3" = 1'-0"



6 FALL RESTRAINT PLAN DETAIL @ METAL STRUCTURE
SCALE: 1 1/2" = 1'-0"

Brown AND Caldwell

WAGNER ARCHITECTS ··PLANNERS

90% DESIGN

Sammamish Plateau Water

Sammamish
Plateau Water
PFAS Project

REVISIONS

REV	DATE	DESCRIPTION

LINE IS 2 INCHES
AT FULL SIZE

DESIGNED: G. SOMERS
DRAWN: A. PURNAPUSPITA
CHECKED: R. WAGNER
CHECKED: ##########
APPROVED: #########

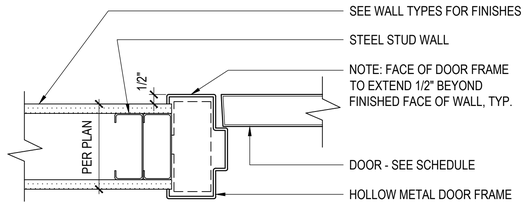
FILENAME
A-20-8003 ROOF DETAILS.DWG
BC PROJECT NUMBER
155452
CLIENT PROJECT NUMBER

ARCHITECTURAL

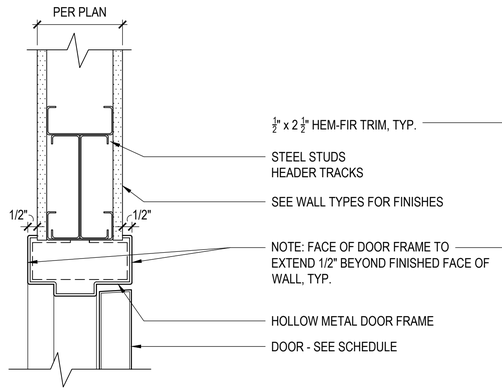
GAC BUILDING
ROOF DETAILS

DRAWING NUMBER
A-20-8003
SHEET NUMBER
OF

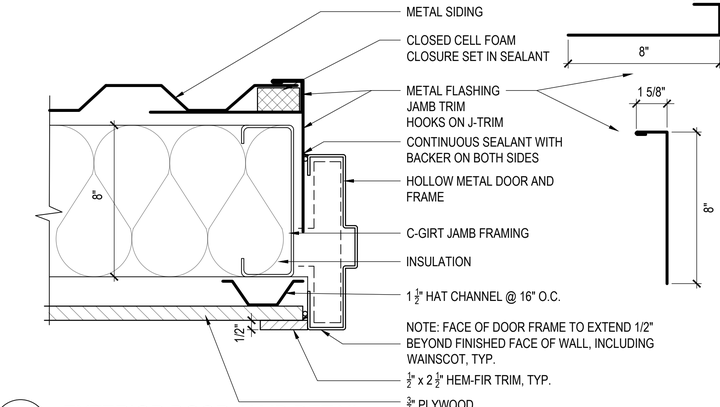
Path: H:\CURRENT PROJECTS\BROWN AND CALDWELL PROJECTS\SAMMAMISH WATER DISTRICT 2020\DRAWINGS\AUTOCAD FILES FILENAME: A-20-8003 ROOF DETAILS.DWG PLOT DATE: 12/16/2020 10:57 AM CAD USER: GREG SOMERS



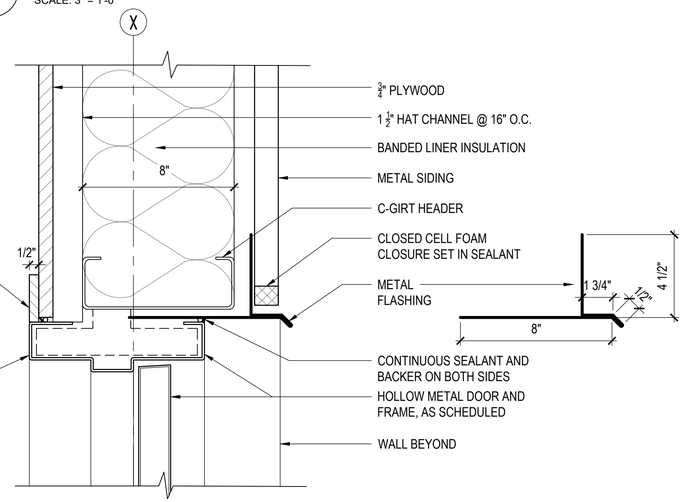
1 INTERIOR DOOR JAMB
SCALE: 3" = 1'-0"



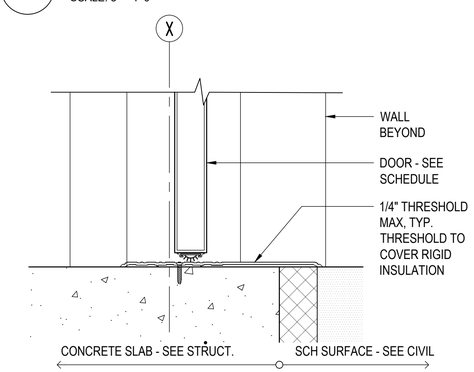
2 INTERIOR DOOR HEAD
SCALE: 3" = 1'-0"



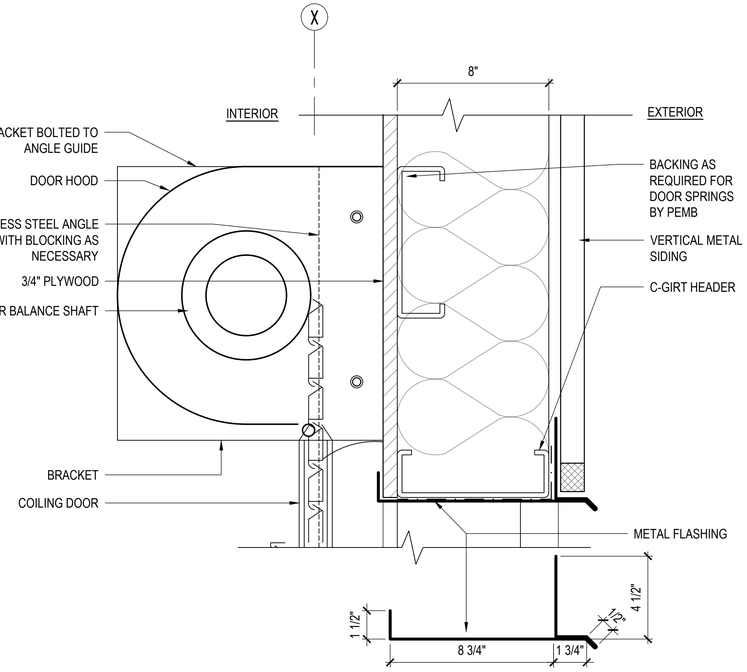
3 EXTERIOR DOOR JAMB DETAIL
SCALE: 3" = 1'-0"



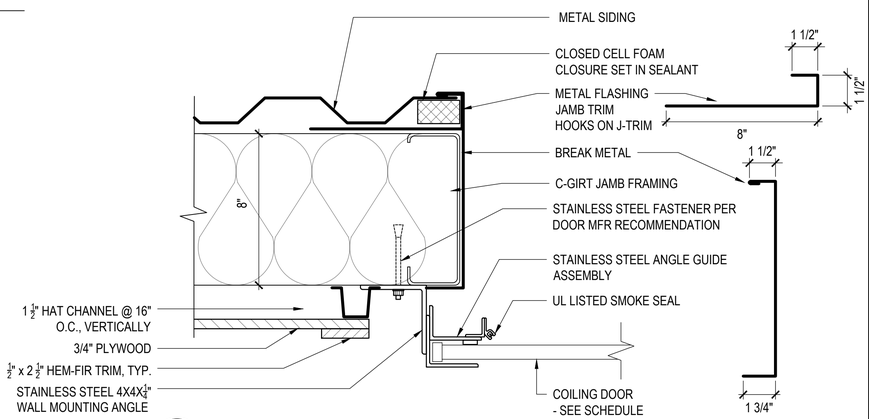
4 EXTERIOR DOOR HEAD DETAIL
SCALE: 3" = 1'-0"



5 EXTERIOR DOOR THRESHOLD DETAIL
SCALE: 3" = 1'-0"



6 OVERHEAD DOOR HEADER
SCALE: 3" = 1'-0"



7 OVERHEAD DOOR JAMB
SCALE: 3" = 1'-0"

Brown AND Caldwell

WAGNER ARCHITECTS ··PLANNERS

90% DESIGN

Sammamish Plateau Water

Sammamish Plateau Water PFAS Project

REVISIONS

REV	DATE	DESCRIPTION

LINE IS 2 INCHES AT FULL SIZE

DESIGNED: G. SOMERS
DRAWN: A. PURNAPUSPITA
CHECKED: R. WAGNER
CHECKED: ##########
APPROVED: #########

FILENAME
A-20-8004 DOOR DETAILS.DWG

BC PROJECT NUMBER
155452

CLIENT PROJECT NUMBER

ARCHITECTURAL

GAC BUILDING DOOR DETAILS

DRAWING NUMBER
A-20-8004

SHEET NUMBER
OF

Path: H:\CURRENT PROJECTS\BROWN AND CALDWELL PROJECTS\SAMMAMISH WATER DISTRICT 2020\DRAWINGS\AUTOCAD FILES FILENAME: A-20-8004 DOOR DETAILS.DWG PLOT DATE: 12/16/2020 11:00 AM CAD USER: GREG SOMERS

GENERAL

G 1 SCOPE
THE GENERAL NOTES AND STANDARD DETAILS ARE GENERAL AND APPLY TO THE ENTIRE PROJECT EXCEPT WHERE THERE ARE SPECIFIC INDICATIONS TO THE CONTRARY.

G 2 PRECEDENCE
IF THERE IS A CONFLICT BETWEEN PROJECT SPECIFICATIONS AND STRUCTURAL DRAWINGS, INCLUDING STRUCTURAL NOTES, CONTACT THE STRUCTURAL ENGINEER OF RECORD FOR CLARIFICATION. SPECIFIC NOTES AND DETAILS ON DRAWINGS TAKE PRECEDENCE OVER GENERAL NOTES AND TYPICAL DETAILS.

G 3 DIMENSIONS
STRUCTURAL DIMENSIONS CONTROLLED BY OR RELATED TO THE MECHANICAL OR ELECTRICAL EQUIPMENT AND DIMENSIONS RELATED TO EXISTING FACILITIES SHALL BE VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION. CONTRACTOR IS RESPONSIBLE FOR COORDINATING ALL CONSTRUCTION DIMENSIONS AND NOTIFYING CONSTRUCTION MANAGER OF DISCREPANCIES IN A TIMELY FASHION.

G 4 PROVISIONS FOR EQUIPMENT
MECHANICAL AND ELECTRICAL EQUIPMENT SUPPORTS, ANCHORAGES, OPENINGS, RECESSES AND EMBEDMENTS NOT SPECIFIED ON THE STRUCTURAL DRAWINGS, BUT SPECIFIED ON OTHER CONTRACT DRAWINGS, SHALL BE PROVIDED PRIOR TO CASTING CONCRETE.

G 5 MEANS, METHODS & CONSTRUCTION LOADS
CONTRACT DRAWINGS AND SPECIFICATIONS REPRESENT THE FINISHED STRUCTURE. CONTRACTOR IS RESPONSIBLE FOR MEANS, METHODS AND SEQUENCE OF CONSTRUCTION, AND SHALL MAKE ADEQUATE PROVISION TO MAINTAIN THE INTEGRITY OF ALL STRUCTURES AT ALL STAGES OF CONSTRUCTION. DETERMINATION OF AND PROVISIONS FOR CONSTRUCTION LOADING SHALL BE PROVIDED BY THE CONTRACTOR.

G 6 SAFETY
CONTRACTOR SHALL TAKE ADEQUATE PRECAUTIONS TO ENSURE THE SAFETY OF WORKERS AND VISITORS TO THE SITE, INCLUDING BUT NOT LIMITED TO SHORING, BRACING AND ACCESS RESTRICTION. COMPLY WITH ALL FEDERAL, STATE AND LOCAL SAFETY CODES AND STANDARDS.

G 7 DRAINAGE SURFACES
SLOPE DRAINAGE SURFACES UNIFORMLY TO DRAIN. SLOPE SHALL BE 1/8" TO 1/4" PER FOOT EXCEPT WHERE NOTED OTHERWISE ON THE PLANS.

G 8 OPENINGS
OPENINGS THROUGH NEW AND EXISTING WALLS AND SLABS FOR PIPES, DUCTS, CONDUITS, ETC., ARE NOT ALL SHOWN ON THE STRUCTURAL DRAWINGS. THE CONTRACTOR SHALL COORDINATE WITH OTHER DISCIPLINES AND PROVIDE THESE OPENINGS IN ACCORDANCE WITH THE OTHER CONTRACT DOCUMENTS.

G 9 COVID19
CONTRACTOR TO ADHERE TO COVID19 EXPOSURE PROTOCALS RELATIVE TO THE LATEST CDC AND WASHINGTON STATE GUIDANCE, WHICHEVER IS MORE STRINGENT. CONTRACTOR TO SUBMIT PROJECT SAFETY PLAN FOR REVIEW AND APPROVAL PRIOR TO MOBILIZATION.

DESIGN CRITERIA

D 1 GOVERNING BUILDING CODE
CONSTRUCTION AND DESIGN SHALL BE IN ACCORDANCE WITH 2015 INTERNATIONAL BUILDING CODE. THIS CODE SHALL GOVERN EXCEPT WHERE OTHER APPLICABLE CODES OR CONTRACT PROVISIONS ARE MORE RESTRICTIVE.

D 2 LIVE LOADS
1. GAC BUILDING GROUND FLOOR ..... 250 PSF
2. GRATING AT TANK AREAS ..... 300 PSF
3. ROOF LIVE LOAD ..... 20 PSF

D 3 MAJOR EQUIPMENT LOADS
1. CONTACTORS (2 TANKS + EQUIP) ..... DL = 400,000

D 4 SNOW LOADS
GROUND SNOW LOAD ..... p_g = 20 PSF
SNOW EXPOSURE FACTOR ..... C_e = 0.90
THERMAL FACTOR ..... C_t = 1.0
SNOW LOAD IMPORTANCE FACTOR ..... I_s = 1.10
FLAT ROOF SNOW LOAD ..... p_f = 15.1 PSF
PLUS DRIFT LOADS IN ACCORDANCE WITH ASCE 7-10

D 5 WIND
BASIC WIND SPEED (ULTIMATE) ..... 120 MPH
RISK CATEGORY III
EXPOSURE CATEGORY C
TOPOGRAPHIC FACTOR ..... K_{zt}= 1.0

D 6 SEISMIC
MCE ACCELERATION, SHORT PERIOD ..... S_S = 1.25 g
MCE ACCELERATION, 1-SEC PERIOD ..... S_1 = 0.50 g
SITE CLASS ..... D
DESIGN ACCEL, SHORT PERIOD ..... S_{DS} = 0.83 g
DESIGN ACCEL, 1-SEC PERIOD ..... S_{D1} = 0.50 g
RISK CATEGORY III
SEISMIC IMPORTANCE FACTOR ..... I_e = 1.25 I_P = 1.00,
EXCEPT FOR FIRE PROTECTION SYSTEM, EGRESS STAIRWAYS, AND COMPONENTS CONTAINING HAZARDOUS MATERIALS ..... I_P = 1.50
SEISMIC DESIGN CATEGORY ..... D
(PRE-ENGINEERED METAL BUILDINGS):
ORDINARY STEEL
MOMENT FRAMES (ASCE 7-10, TABLE 12.2-1) ..... R = 3.5 Ω_o = 3
ORDINARY STEEL CONCENTRICALLY
BRACED FRAMES (ASCE 7-10, TABLE 12.2-1) ..... R = 3.25 Ω_o = 2
ANALYSIS PROCEDURE: EQUIVALENT LATERAL FORCE
EXCEPT AT LIQUID CONTAINING BASINS ANALYSIS
BASED ON ACI 350.3-06 ..... R_i = 2 R_c = 1

FOUNDATION

F 1 DESIGN BASIS
FOUNDATION DESIGN IS BASED ON RECOMMENDATIONS CONTAINED IN THE GEOTECHNICAL REPORT. CONTRACTOR SHALL FOLLOW THE PROJECT SPECIFICATIONS AND TAKE INTO CONSIDERATION RECOMMENDATIONS CONTAINED IN THE REPORT. NOTIFY THE CONSTRUCTION MANAGER OF CONFLICTS BETWEEN SPECIFICATIONS AND THE REPORT RECOMMENDATIONS FOR RESOLUTION.

F 2 GROUNDWATER AND FLOOD DESIGN ELEVATIONS
HIGH GROUNDWATER =
200-YEAR FLOOD =

F 3 ALLOWABLE BEARING PRESSURE
SHALLOW FOUNDATIONS SHALL BEAR ON AT LEAST 2 FEET OF STRUCTURAL FILL AND HAVE BEEN DESIGNED FOR AN ALLOWABLE BEARING PRESSURE OF 1,500 PSF.

F 4 MINIMUM FOUNDATION PREPARATION
ALL NEW FOUNDATIONS AND SLAB ON GRADE FLOORS SHALL BE SUPPORTED ON A MINIMUM OF 2 FEET OF PROPERLY PLACED AND COMPACTED STRUCTURAL FILL (SEE GEOTECHNICAL REPORT).

F 5 DIFFERING CONDITIONS
FOUNDATION CONDITIONS NOTED DURING CONSTRUCTION WHICH DIFFER FROM THOSE INDICATED IN THE REPORT SHALL BE IMMEDIATELY BROUGHT TO THE ATTENTION OF THE CONSTRUCTION MANAGER. CONTRACTOR IS RESPONSIBLE FOR REPLACING WORK CONDUCTED AFTER SUCH NOTIFICATION BUT BEFORE CONSTRUCTION MANAGER PROVIDES ADDITIONAL DIRECTIONS.

F 6 STRUCTURAL BACKFILL
UNLESS NOTED OTHERWISE, STRUCTURAL BACKFILL SHALL BE PLACED IN UNIFORM LAYERS AND SHALL BE BROUGHT UP UNIFORMLY AROUND THE STRUCTURE. ADDITIONALLY, BACKFILL SHALL BE BROUGHT UP UNIFORMLY ON BOTH SIDES OF FOUNDATION WALLS. SEE SPECIFICATION 31 23 00 FOR ADDITIONAL INFORMATION.

CONCRETE

C 1 APPLICABLE CODES
CONCRETE CONSTRUCTION SHALL CONFORM TO ACI 301-10 "SPECIFICATIONS FOR STRUCTURAL CONCRETE", AND THE FOLLOWING CODES:
ACI 318-14 "BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE"

C 2 REINFORCING STEEL DETAILS
ALL DETAILING, FABRICATION AND ERECTION OF REINFORCING BARS, UNLESS OTHERWISE NOTED, SHALL BE IN ACCORDANCE WITH ACI DETAILING MANUAL (ACI SP-66), LATEST EDITION.

C 3 DESIGN STRENGTH
1. STRUCTURAL CAST-IN-PLACE CONCRETE EXCEPT AS NOTED IN ITEM 2 BELOW ..... f'c = 4,500 PSI
2. REINFORCED STEEL ..... fy = 60,000 PSI
ASTM A615, GRADE 60 DEFORMED BARS UNLESS OTHERWISE NOTED

C 4 CONCRETE COVER
CONCRETE COVER FOR REINFORCING BARS SHALL CONFORM TO ACI 350 AND AS FOLLOWS WITH MINIMUM COVER OF ONE BAR DIAMETER:
1. CONCRETE CAST AGAINST EARTH ..... 3"
2. CONCRETE EXPOSED TO EARTH, WASTEWATER, CHEMICALS OR WEATHER ..... 2"
3. CONCRETE NOT EXPOSED TO EARTH, WASTEWATER, CHEMICALS OR WEATHER ..... 1-1/2"

C 5 BAR DEVELOPMENT AND LAP SPLICE LENGTH
SEE TABLE AT THE END OF THESE STRUCTURAL NOTES. IN SLABS, BEAMS, GIRDERS AND HORIZONTAL REINFORCING AT WALLS, SPLICES OF ADJACENT REINFORCING STEEL BARS SHALL BE STAGGERED AT LEAST ONE SPLICE LENGTH, UNLESS OTHERWISE SPECIFIED.

C 6 WELDING REINFORCING BARS
ALL REINFORCING TO BE WELDED SHALL CONFORM TO ASTM A706. REBAR WELDING SHALL BE IN ACCORDANCE WITH AWS D1.4.

C 7 STANDARD HOOKS
BARS ENDING IN RIGHT ANGLE BENDS OR HOOKS SHALL CONFORM TO THE REQUIREMENTS OF ACI 318-14. PROVIDE STANDARD HOOK IN BARS WHICH TERMINATE AT WALL OR SLAB EDGES / INTERSECTIONS THAT PROVIDE LESS THAN THE SPECIFIED DEVELOPMENT LENGTH.

C 8 CHAMFERS
EXCEPT AS OTHERWISE REQUIRED, EXPOSED CONCRETE CORNERS AND EDGES SHALL HAVE 3/4" CHAMFERS. RE-ENTRANT CORNERS SHALL NOT HAVE FILLETS.

C 9 ANCHOR BOLTS
ANCHOR BOLTS SHALL BE STAINLESS STEEL TYPE 316 MATERIAL UNLESS OTHERWISE NOTED (SEE SPECIFICATIONS).

GROUT

GR 1 PRECISION NON-SHRINK CEMENT GROUT FOR STRUCTURAL STEEL COLUMNS AND TRUSS BEARING BASE PLATES:
MASTERFLOW 928 GROUT OR EQUAL APPROVED BY OWNER.

GR 2 EQUIPMENT GROUTING
SEE MECHANICAL SPECIFICATIONS AND SPECIFICATION SECTION 03 60 00, GROUT.

GR 3 EPOXY ADHESIVE GROUT AT ANCHORS INTO CONCRETE: HILTI HIT-RE 500v3
EPOXY ADHESIVE ANCHOR SYSTEM BY HILTI INC. OR EQUAL APPROVED BY ENGINEER OF RECORD. INSTALLERS OF HORIZONTAL OR UPWARDLY INCLINED ADHESIVE ANCHORS SHALL BE CERTIFIED IN ACCORDANCE WITH THE ACI / CRSI ADHESIVE ANCHOR INSTALLER CERTIFICATION PROGRAM.

GR 4 MASONRY ADHESIVE ANCHORS: HILTI HIT-HY 70.

DOWELS

DL 1 LOCATE HOLES IN EXISTING CONCRETE TO MISS MAIN REINFORCING BARS, STIRRUPS, AND EMBEDMENTS. THIS MAY INVOLVE RELOCATING DOWELS FROM POSITIONS SHOWN. NOTIFY THE OWNER OF ANY DOWEL RELOCATIONS. PRIOR TO DRILLING HOLES, FIELD VERIFY AND MARK THE LOCATION OF NEARBY EXISTING REINFORCING BARS, STIRRUPS AND EMBEDMENTS USING A PACHOMETER. IF THEY ARE HIT DURING DRILLING, NOTIFY THE OWNER.

DL 2 CLEAN AND PREPARE HOLES IN ACCORDANCE WITH THE EPOXY MANUFACTURER'S RECOMMENDATIONS. AS A MINIMUM, BLOW COMPRESSED OIL-FREE AIR FROM THE BOTTOM OF HOLE TOWARDS THE SURFACE. DRY AND CLEAN HOLE OF CONTAMINANTS.

DL 3 PRESSURE GROUT ALL HOLES DEEPER THAN TWO FEET. SUBMIT PROCEDURE AND TECHNIQUE FOR PRESSURE GROUTING TO OWNER FOR APPROVAL PRIOR TO PLACING EPOXY.

DL 4 FILL EACH HOLE WITH A SUFFICIENT AMOUNT OF EPOXY TO COMPLETELY SURROUND THE DOWEL. INSERT THE DOWEL AFTER THE EPOXY IS PLACED IN THE HOLE.

STEEL

ST 1 ALL STRUCTURAL STEEL WORK SHALL BE IN ACCORDANCE WITH THE AISC "SPECIFICATION FOR STRUCTURAL STEEL BUILDINGS" (AISC 360-10) AND AISC "CODE OF STANDARD PRACTICE FOR STEEL BUILDINGS AND BRIDGES" (AISC 303-10). IN SEISMIC DESIGN CATEGORIES D, E AND F, THE PROVISIONS OF AISC 341-10, "SEISMIC PROVISIONS FOR STRUCTURAL STEEL BUILDINGS", SHALL ALSO APPLY.

ST 2 MATERIALS
1. STEEL WIDE FLANGE SHAPES SHALL CONFORM TO ASTM A992. OTHER STEEL SHAPES AND PLATES SHALL CONFORM TO ASTM A36.
2. STRUCTURAL STEEL PIPE SHALL CONFORM TO ASTM A53 TYPES E OR S, GRADE B. STRUCTURAL STEEL TUBING SHALL CONFORM TO ASTM A500 GRADE B (Fy = 46 KSI).
3. ALL STAINLESS STEEL SHALL BE TYPE 316 MEETING ASTM A276 FOR BARS AND SHAPES, AND ASTM A240 FOR PLATES, UNLESS OTHERWISE SPECIFIED. ALL STAINLESS STEEL SHALL BE PASSIVATED PER ASTM A380.

ST 3 WELDING
1. WELDING SHALL CONFORM TO AWS D1.1-1 AND AISC 341-10.
2. ELECTRODES FOR SHOP AND FIELD WELDS SHALL CONFORM TO AWS A5.1 OR A5.5, CLASS E70XX.
3. STAINLESS STEEL WELDING SHALL CONFORM TO AWS D1.6 WITH A5.4 OR A5.9 ELECTRODES.

ST 4 BOLTS
STRUCTURAL BOLTS AT STEEL FRAMING SHALL BE GALVANIZED AND CONFORM TO ASTM A325N (TYPE 1) FOR CONNECTION OF GALVANIZED OR PAINTED FRAMING. HIGH STRENGTH BOLTS SHALL BE FULLY TENSIONED UNLESS CONNECTING HSS SHAPES OR OTHERWISE NOTED. STAINLESS STEEL TYPE 316 BOLTS SHALL BE USED FOR CONNECTION OF STAINLESS STEEL AND ALUMINUM FRAMING.

ST 5 EXPANSION ANCHORS SHALL BE STAINLESS STEEL "KWIK BOLT TZ" BY HILTI INC. OR EQUAL APPROVED BY OWNER.

ST 6 PAINTING
STRUCTURAL STEEL SHALL BE PAINTED IN ACCORDANCE WITH SPECIFICATION. SHOP PRIMER SHALL BE COMPATIBLE WITH FINISH COATINGS.

STEEL GRATING

SG 1 WHERE INDICATED ON DRAWINGS, GRATING SHALL BE WELDED STEEL BAR GRATING FABRICATED FROM STEEL CONFORMING TO ASTM SPECIFICATION A569. GRATING THICKNESS SHALL BE 1 1/2" UNLESS NOTED OTHERWISE ON THE DRAWINGS. THE MINIMUM BEARING BAR WIDTH SHALL BE 3/16". BEARING BAR CLEAR SPACING SHALL NOT EXCEED 1" AND CROSSBAR SPACING SHALL NOT EXCEED 4" CENTER TO CENTER (NAAMM DESIGNATION W-19-4). STEEL GRATING SHALL BE HOT-DIP GALVANIZED IN ACCORDANCE WITH ASTM SPECIFICATION A123 AFTER FABRICATION.

SG 2 STEEL GRATING STAIR TREADS SHALL BE FABRICATED FROM 1 1/2" BAR GRATING AS DESCRIBED ABOVE AND SHALL COMPLY WITH NAAMM RECOMMENDATIONS CONTAINED IN THE METAL BAR GRATING MANUAL. TREADS SHALL BE GALVANIZED AND BE COMPLETE WITH ABRASIVE NOSINGS. CHECKERED PLATE NOSING IS NOT ALLOWED.

SG 3 STEEL GRATING SHALL BE ANCHORED TO SUPPORT STEEL WITH 1/4" DIAMETER SELF-TAPPING GALVANIZED SCREWS PLACED THROUGH GALVANIZED U-SHAPED CLIPS ENGAGING TWO MAIN BEARING BARS. MINIMUM FOUR CLIPS PER GRATING PANEL. MAXIMUM DISTANCE BETWEEN CLIPS SHALL BE THREE FEET.

SG 4 ALL GRATING, INCLUDING STAIR TREADS, SHALL BE SERRATED FOR SLIP RESISTENCE UNLESS NOTED OTHERWISE.

Brown AND Caldwell

90% DESIGN

Sammamish Plateau Water

Sammamish Plateau Water PFAS Project

REVISIONS

REV	DATE	DESCRIPTION

LINE IS 2 INCHES AT FULL SIZE

DESIGNED: R.MANTZ
DRAWN: M.GISSE
CHECKED:
CHECKED:
APPROVED:

FILE NAME

BC PROJECT NUMBER
155452

CLIENT PROJECT NUMBER
XX

STRUCTURAL

STRUCTURAL GENERAL NOTES 1

DRAWING NUMBER
S-20-0001

SHEET NUMBER
OF

Path: BIM 360://155452 - Sammamish Plateau PFAS Design/155452-S-20V19.rvt
Plot Date: 12/16/2020 9:44:33 AM

SPECIAL INSPECTIONS

SI 1 AN INDEPENDENT TESTING COMPANY RETAINED BY THE OWNER AND APPROVED BY THE BUILDING OFFICIAL SHALL INSPECT THE FOLLOWING
(SEE EXPANDED LIST ON DRAWINGS 000-S-003 AND 000-S-004, SPECIFICATIONS AND GOVERNING CODE):

1. SOIL COMPACTION AT FOUNDATIONS.
2. REINFORCING BAR, CONCRETE PLACEMENT AND TAKING OF CONCRETE TEST SPECIMENS.
3. ANCHOR BOLTS.
4. FIELD WELDING OF STRUCTURAL STEEL AND ALUMINUM.
5. SHOP WELDING OF STRUCTURAL STEEL EXCEPT WHERE WELDING IS DONE IN AN APPROVED FABRICATOR'S SHOP IN ACCORDANCE WITH THE PROVISIONS OF THE GOVERNING BUILDING CODE.
6. EXPANSION ANCHOR INSTALLATION.
7. ANCHORS INSTALLED USING EPOXY ADHESIVE.
8. HIGH STRENGTH BOLTING.
9. MECHANICAL AND ELECTRICAL EQUIPMENT, PERIODIC SPECIAL INSPECTION OF STRUCTURAL COMPONENTS FOR SEISMIC RESISTANCE:
   - A. ANCHORAGE OF ELECTRICAL EQUIPMENT.
   - B. EMERGENCY AND STANDBY POWER SYSTEMS.
   - C. PIPING SYSTEMS INTENDED TO CARRY FLAMMABLE, COMBUSTIBLE OR HIGHLY TOXIC CONTENTS AND THEIR ASSOCIATED UNITS.
   - D. HVAC DUCTWORK THAT WILL CONTAIN HAZARDOUS MATERIALS.
   - E. INSTALLATION OF COMPONENTS WHERE THE COMPONENT IMPORTANCE FACTOR IS 1.5.
   - F. ELECTRICAL MOTORS, TRANSFORMERS, SWITCHGEAR UNIT SUBSTATIONS, AND MOTOR CONTROL CENTERS.
   - G. TANKS, HEAT EXCHANGERS, AND PRESSURE VESSELS.
   - H. EQUIPMENT USING COMBUSTIBLE ENERGY SOURCES.
   - I. EQUIPMENT VIBRATION ISOLATION SYSTEMS.

SI 2 CONTRACTOR SHALL NOTIFY THE TESTING COMPANY FOR ALL INSPECTIONS.

STRUCTURAL OBSERVATIONS

SO 1 THE OWNER SHALL RETAIN A REGISTERED DESIGN PROFESSIONAL TO PERFORM STRUCTURAL OBSERVATIONS. THE CONSTRUCTION MANAGER SHALL NOTIFY THE OWNER AT LEAST 48 HOURS BEFORE A DESIGNATED WORK IS TO BE COVERED. REFER TO SPECIFICATION 01400 FOR ADDITIONAL REQUIREMENTS.

SO 2 REQUIRED STRUCTURAL OBSERVATIONS INCLUDE:

1. STRUCTURAL FILL AND DEEP FOUNDATIONS.
2. FOUNDATIONS PREPARED FOR CONCRETE PLACEMENT.
3. COMPLETION OF LATERAL FORCE RESISTING ELEMENTS INCLUDING MOMENT CONNECTIONS, BRACING, DIAPHRAGMS, AND OTHER ELEMENTS.

STRUCTURAL DEFERRED SUBMITTALS

SDS 1 THE CONTRACTOR SHALL SUBMIT DRAWINGS AND CALCULATIONS BEARING THE SEAL OF A PROFESSIONAL ENGINEER LICENSED IN THE STATE OF WASHINGTON TO THE ENGINEER FOR REVIEW. STRUCTURAL DEFERRED SUBMITTALS INCLUDE:

1. PRE-ENGINEERED METAL BUILDING
2. PRECAST-PRESTRESSED CONCRETE ELEMENTS INCLUDING:
   - a. SITE STRUCTURES AND VAULTS.
3. ANCHOR BOLTS FOR ALL EQUIPMENT ANCHORAGE.
4. GUARDRAILS AND HANDRAILS.
5. FLOOR AND ROOF ACCESS HATCHES.
6. ALTERNATE ROOF DECK FASTENING (IF USED).
7. CONSTRUCTION SHORING.

TENSION DEVELOPMENT AND LAP SPLICE LENGTHS (IN INCHES)

BAR SIZE	APPLICATION	CONCRETE COVER = 0.75 IN.			CONCRETE COVER = 1.00 IN.			CONCRETE COVER = 1.50 IN.			CONCRETE COVER = 2.00 IN.			CONCRETE COVER = 3.00 IN.		
		TOP	OTHER	MIN C/C SPACING	TOP	OTHER	MIN C/C SPACING	TOP	OTHER	MIN C/C SPACING	TOP	OTHER	MIN C/C SPACING	TOP	OTHER	MIN C/C SPACING
#3	DEVELOPMENT LAP SPLICE	12 16	12 16	2.00 2.25	12 16	12 16	2.50 2.75	12 16	12 16	3.50 3.75	12 16	12 16	4.50 4.75	12 16	12 16	6.50 6.75
#4	DEVELOPMENT LAP SPLICE	19 24	15 19	2.00 2.50	15 20	12 16	2.50 3.00	15 20	12 16	3.50 4.00	15 20	12 16	4.50 5.00	15 20	12 16	6.50 7.00
#5	DEVELOPMENT LAP SPLICE	28 37	21 28	2.25 2.75	22 29	17 22	2.75 3.25	19 24	15 19	3.75 4.25	19 24	15 19	4.75 5.25	19 24	15 19	6.75 7.25
#6	DEVELOPMENT LAP SPLICE	37 48	29 37	2.25 3.00	31 40	24 31	2.75 3.50	22 29	17 22	3.75 4.50	22 29	17 22	4.75 5.50	22 29	17 22	6.75 7.50
#7	DEVELOPMENT LAP SPLICE	60 78	46 60	2.50 3.25	50 64	38 50	3.00 3.75	37 48	28 37	4.00 4.75	33 42	25 33	5.00 5.75	33 42	25 33	7.00 7.75
#8	DEVELOPMENT LAP SPLICE	74 96	57 74	2.50 3.50	62 80	48 62	3.00 4.00	47 60	36 47	4.00 5.00	37 48	29 37	5.00 6.00	37 48	29 37	7.00 8.00
#9	DEVELOPMENT LAP SPLICE	90 117	69 90	2.75 3.75	76 98	58 76	3.25 4.25	57 74	44 57	3.25 4.25	46 60	36 46	5.25 6.25	42 55	32 42	7.25 8.25

NOTES:
1. TABULATED VALUES ARE BASED ON UNCOATED GRADE 60 REINFORCING BARS AND NORMAL-WEIGHT CONCRETE MINIMUM f'c = 4,000 PSI.
2. TOP BARS ARE HORIZONTAL BARS WITH MORE THAN 12 IN. OF FRESH CONCRETE CAST BELOW THE BARS.
3. LAP SPLICE LENGTHS ARE LAP CLASS B = 1.3 l_d.
4. TENSION DEVELOPMENT LENGTHS AND TENSION LAP SPLICE LENGTHS ARE CALCULATED PER ACI 318, SECTIONS 12.2.3 AND 12.15, RESPECTIVELY.
5. LENGTHS ABOVE THE HEAVY LINE DO NOT CHANGE BASE ON COVER THICKNESS. LENGTHS BELOW THE HEAVY LINE ARE DIFFERENT AT EACH COVER THICKNESS.
   [THIS FULL CHAR IS ONLY USED ON PROJECTS WITH LOWER COVER REQUIRMENTS.]

Brown AND Caldwell

90% DESIGN

Sammamish Plateau Water

Sammamish
Plateau Water
PFAS Project

REVISIONS

REV	DATE	DESCRIPTION

LINE IS 2 INCHES
AT FULL SIZE

DESIGNED: R.MANTZ
DRAWN: M.GISSE
CHECKED:
CHECKED:
APPROVED:
FILE NAME
BC PROJECT NUMBER
155452
CLIENT PROJECT NUMBER
XX
STRUCTURAL

STRUCTURAL
GENERAL NOTES 2

DRAWING NUMBER
S-20-0002
SHEET NUMBER
OF

Plot Date: 12/16/2020 9:44:34 AM Path: BIM 360://155452 - Sammamish Plateau PFAS Design/155452-S-20V19.rvt

TABLE 1

REQUIRED SPECIAL INSPECTIONS - STRUCTURAL SYSTEMS

SYSTEM OR MATERIAL	REQUIRED INSPECTION	FREQUENCY OF INSPECTION		REMARKS
		CONTINUOUS	PERIODIC	
SOILS	VERIFY EXCAVATIONS ARE EXTENDED TO PROPER DEPTH AND HAVE REACHED PROPER MATERIAL		X	
	VERIFY SOIL MATERIALS BELOW FOOTINGS ARE ADEQUATE TO ACHIEVE DESIGN BEARING CAPACITY		X	
	PRIOR TO PLACEMENT OF CONTROLLED FILL, OBSERVE SUBGRADE AND VERIFY THAT SITE HAS BEEN PREPARED PROPERLY		X	
	PERFORM CLASSIFICATION AND TESTING OF CONTROLLED FILL MATERIALS		X	SEE TABLE 3
	VERIFY USE OF PROPER MATERIALS, DENSITIES AND LIFT THICKNESSES DURING PLACEMENT AND COMPACTION OF CONTROLLED FILL	X		SEE TABLE 3
	OBSERVE CAISSON SINKING	X		
CONCRETE	INSPECT FORMWORK FOR LOCATION AND DIMENSIONS OF MEMBER BEING FORMED		X	
	VERIFY MATERIAL FOR REINFORCEMENT		X	CONTRACTOR TO SUBMIT CERTIFIED MILL TEST REPORTS
	REINFORCING STEEL PLACEMENT		X	
	INSPECT ANCHORS TO BE CAST IN CONCRETE		X	PRIOR TO AND DURING CONCRETE PLACEMENT
	INSPECT POST-INSTALLED CONCRETE ANCHORS: - HORIZONTAL AND UPWARDLY INCLINED ADHESIVE ANCHORS - OTHER ANCHORS UNLESS ICC REPORT REQUIRED CONTINUOUS INSPECTION	X	X	INSPECTION TO CONFORM TO IBC AND TO ANCHOR MANUFACTURER'S RECOMMENDATIONS AND ICC REPORTS
	VERIFY USE OF REQUIRED CONCRETE MIX DESIGN(S)		X	
	AT THE TIME FRESH CONCRETE IS SAMPLED TO FABRICATE SPECIMENS FOR STRENGTH TESTS, PERFORM SLUMP AND AIR CONTENT TESTS, AND TEMPERATURE OF CONCRETE	X		CONTINUOUS DURING PREPARATION OF SAMPLES
	CONCRETE PLACEMENT	X		
	INSPECTION FOR MAINTENANCE OF CURING PROCEDURES AND TEMPERATURE		X	VERIFY APPROPRIATE CURING METHOD HAS BEEN IMPLEMENTED AFTER EACH POUR
	VERIFY IN-SITU CONCRETE STRENGTH PRIOR TO REMOVAL OF SHORES AND FORMS FROM STRUCTURAL SLABS AND BEAMS		X	
	CEMENTITIOUS GROUTING OF BASE PLATES AND EPOXY GROUTING FOR EQUIPMENT MOUNTING	X		

TABLE 1

REQUIRED SPECIAL INSPECTIONS - STRUCTURAL SYSTEMS

SYSTEM OR MATERIAL	REQUIRED INSPECTION	FREQUENCY OF INSPECTION		REMARKS
		CONTINUOUS	PERIODIC	
STRUCTURAL STEEL	FABRICATION OF STRUCTURAL ELEMENTS			FABRICATOR SHALL BE APPROVED IN ACCORDANCE WITH IBC, CHAPTER 17 TO PERFORM WORK WITHOUT SPECIAL INSPECTION
	VERIFY MATERIAL OF ANCHOR BOLTS AND THREADED RODS		X	CONTRACTOR TO SUBMIT MANUFACTURER'S CERTIFIED TEST REPORTS
	VERIFY MATERIAL OF HIGH-STRENGTH BOLTS, NUTS AND WASHERS		X	CONTRACTOR TO SUBMIT MANUFACTURER'S CERTIFIED TEST REPORTS
	VERIFY MATERIAL FOR STRUCTURAL STEEL SHAPES, PLATES, BARS, ETC.		X	CONTRACTOR TO SUBMIT CERTIFIED MILL TEST REPORTS
	VERIFY MATERIALS FOR WELD FILLER MATERIALS		X	
	VERIFY WELDER QUALIFICATIONS		X	CONTRACTOR TO SUBMIT WELDERS CERTIFICATES
	VERIFY USE OF PROPER WELDING PROCEDURES		X	
	INSPECT COMPLETE AND PARTIAL-PENETRATION GROOVE WELDS, MULTI-PASS FILLET WELDS, AND SINGLE-PASS FILLET WELDS GREATER THAN 5/16"	X		
	INSPECT SINGLE-PASS FILLET WELDS LESS THAN OR EQUAL TO 5/16"		X	VISUALLY INSPECT ALL WELDS
	INSPECT HIGH-STRENGTH BEARING-TYPE BOLTED CONNECTIONS		X	
	INSPECT HIGH-STRENGTH SLIP CRITICAL-TYPE BOLTED CONNECTIONS	X		
	VERIFY TYPE, DEPTH AND GAGE OF DECKING AND GRATING		X	
	INSPECT INSTALLATION (ATTACHMENT) OF DECKING AND GRATING		X	
	INSPECT FRAME AND TRUSSES TO VERIFY THAT BRACING, STIFFENERS, MEMBER LOCATIONS AND JOINT DETAILS COMPLY WITH APPROVED CONSTRUCTION DRAWINGS		X	

QUALITY ASSURANCE NOTES

1. THE QUALITY OF THE WORKMANSHIP AND THE QUALITY OF THE MATERIALS OF CONSTRUCTION ARE GOVERNED BY THE INTERNATIONAL BUILDING CODE, 2012 EDITION (IBC).
2. ALL NEW STRUCTURES AND MODIFICATIONS TO EXISTING STRUCTURES TO BE CONSTRUCTED AS A PART OF THIS PROJECT ARE CLASSIFIED AS OCCUPANT CATEGORY III, WASTE WATER TREATMENT FACILITY, IN ACCORDANCE WITH THE IBC. THE STRUCTURES ARE CLASSIFIED AS SEISMIC DESIGN CATEGORY D.
3. TO ASSURE THE QUALITY OF THE CONSTRUCTION OF THIS PROJECT, STRUCTURAL TESTS, SPECIAL INSPECTION AND STRUCTURAL OBSERVATION WILL BE PERFORMED IN ACCORDANCE WITH IBC, CHAPTER 17.
4. WHERE FREQUENCY OF INSPECTION IS SPECIFIED TO BE CONTINUOUS, THE SPECIAL INSPECTOR IS EXPECTED TO BE PRESENT IN THE AREA WHERE THE WORK IS BEING PERFORMED AND PROVIDING FULL-TIME OBSERVATION OF THE WORK REQUIRING SPECIAL INSPECTION.
5. WHERE FREQUENCY OF INSPECTION IS SPECIFIED TO BE PERIODIC, THE SPECIAL INSPECTOR IS EXPECTED TO BE PRESENT IN THE AREA WHERE THE WORK HAS BEEN OR IS BEING PERFORMED AND AT THE COMPLETION OF THE WORK (PRIOR TO THE NEXT CONSTRUCTION TASK).
6. SPECIAL INSPECTIONS ARE IN ADDITION TO INSPECTIONS BY THE BUILDING OFFICIALS. CONSTRUCTION IS SUBJECT TO INSPECTION BY THE BUILDING OFFICIAL. COORDINATE WITH BUILDING DEPARTMENT TO DETERMINE REQUIRED INSPECTIONS.
7. CONTRACTOR SHALL PROVIDE ACCESS TO THE WORK FOR REQUIRED INSPECTIONS. CONTRACTOR SHALL PROVIDE NOTIFICATION IN ADVANCE OF REQUIRED INSPECTIONS, TESTING AND STRUCTURAL OBSERVATIONS.

Brown AND Caldwell

90% DESIGN

Sammamish Plateau Water

Sammamish Plateau Water PFAS Project

REVISIONS

REV	DATE	DESCRIPTION

LINE IS 2 INCHES AT FULL SIZE

DESIGNED: R.MANTZ
DRAWN: M.GISSE
CHECKED:
CHECKED:
APPROVED:
FILE NAME

BC PROJECT NUMBER
155452
CLIENT PROJECT NUMBER
XX

STRUCTURAL

SPECIAL INSPECTION 1

DRAWING NUMBER
S-20-0003
SHEET NUMBER
OF

TABLE 2

REQUIRED SPECIAL INSPECTIONS - NONSTRUCTURAL SYSTEMS

SYSTEM OR MATERIAL	REQUIRED INSPECTION	FREQUENCY OF INSPECTION		REMARKS
		CONTINUOUS	PERIODIC	
ARCHITECTURAL	INSPECT WELDING OF GUARD AND HANDRAIL SYSTEMS		X	
	EXTERIOR WALL PANELS AND THEIR ANCHORAGE		X	
	SUSPENDED CEILINGS AND THEIR ANCHORAGE		X	
MECHANICAL	INSPECT ANCHORAGE OF FIRE SPRINKLER SYSTEM		X	
	INSPECT ANCHORAGE OF ALL MECHANICAL SYSTEMS (INCLUDING EQUIPMENT PIPING, DUCT WORK, ETC.) REQUIRING STANDBY POWER		X	
	CERTIFICATE OF COMPLIANCE FOR ALL MECHANICAL EQUIPMENT REQUIRING STANDBY POWER			EQUIPMENT MANUFACTURER SHALL PROVIDE CERTIFICATE OF COMPLIANCE
ELECTRICAL	INSPECT ANCHORAGE OF ELECTRICAL EQUIPMENT FOR STANDBY POWER		X	
	INSPECT ANCHORAGE OF ALL OTHER ELECTRICAL EQUIPMENT REQUIRING STANDBY POWER		X	
	CERTIFICATE OF COMPLIANCE FOR ALL ELECTRICAL EQUIPMENT FOR STANDBY POWER AND ALL ELECTRICAL EQUIPMENT REQUIRING STANDBY POWER			EQUIPMENT MANUFACTURER SHALL PROVIDE CERTIFICATE OF COMPLIANCE
	EMERGENCY LIGHTING		X	

TABLE 3

REQUIRED TESTING FOR SPECIAL INSPECTIONS

SYSTEM OR MATERIAL	TESTING		REMARKS
	CODE OR STANDARD REFERENCE	FREQUENCY	
GEOTECHNICAL			
PREPARED SUBGRADE DENSITY	ASTM D6938	EACH 300 SF OF PREPARED SUBGRADE	PER GEOTECHNICAL REPORT
FILL IN-PLACE DENSITY	ASTM D6938	EACH 300 SF OF EACH LIFT PLACED EACH DAY	PER GEOTECHNICAL REPORT
CONCRETE			
CONCRETE COMPRESSIVE STRENGTH	ASTM C31,ASTM C39,ASTM C172	SEE SPECIFICATION 03300	
CONCRETE SLUMP	ASTM C143	WHENEVER CYLINDERS ARE CAST	
CONCRETE AIR CONTENT	ASTM C231	WHENEVER CYLINDERS ARE CAST	
CONCRETE TEMPERATURE	ASTM C1064	WHENEVER CYLINDERS ARE CAST	
CEMENTITIOUS AND EPOXY GROUT COMPRESSIVE STRENGTH	ASTM C942 (CEMENTITIOUS) ASTM C579 (EPOXY)		TEST 2" CUBES FOR EACH GROUT SHIPMENT TO THE FIELD
STEEL			
MAGNETIC PARTICLE (MT) AND ULTRASONIC (UT) TESTING OF WELDS	MT - AWS D1.1 6.14.4 UT - AWS D1.1 6.13 & 6.14.3	AT ALL PARTIAL AND FULL PENETRATION FIELD WELDS	
PRE-CONSTRUCTION TESTING OF WELDING STUDS	AWS D1.1 7.7.1	EACH SIZE AND TYPE OF STUD EACH SHIFT	
PRE-INSTALLATION VERIFICATION OF PRETENSIONED HIGH STRENGTH BOLTS	RCSC SPECIFICATION FOR STRUCTURAL JOINTS USING ASTM A325 OR A490 BOLTS SECTION 7	EACH COMBINATION OF DIAMETER, LENGTH, GRADE, AND LOT TO BE USED IN THE WORK	

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CLIENT PROJECT NUMBER XX

STRUCTURAL

SPECIAL INSPECTION 2

DRAWING NUMBER
S-20-0004
SHEET NUMBER
OF

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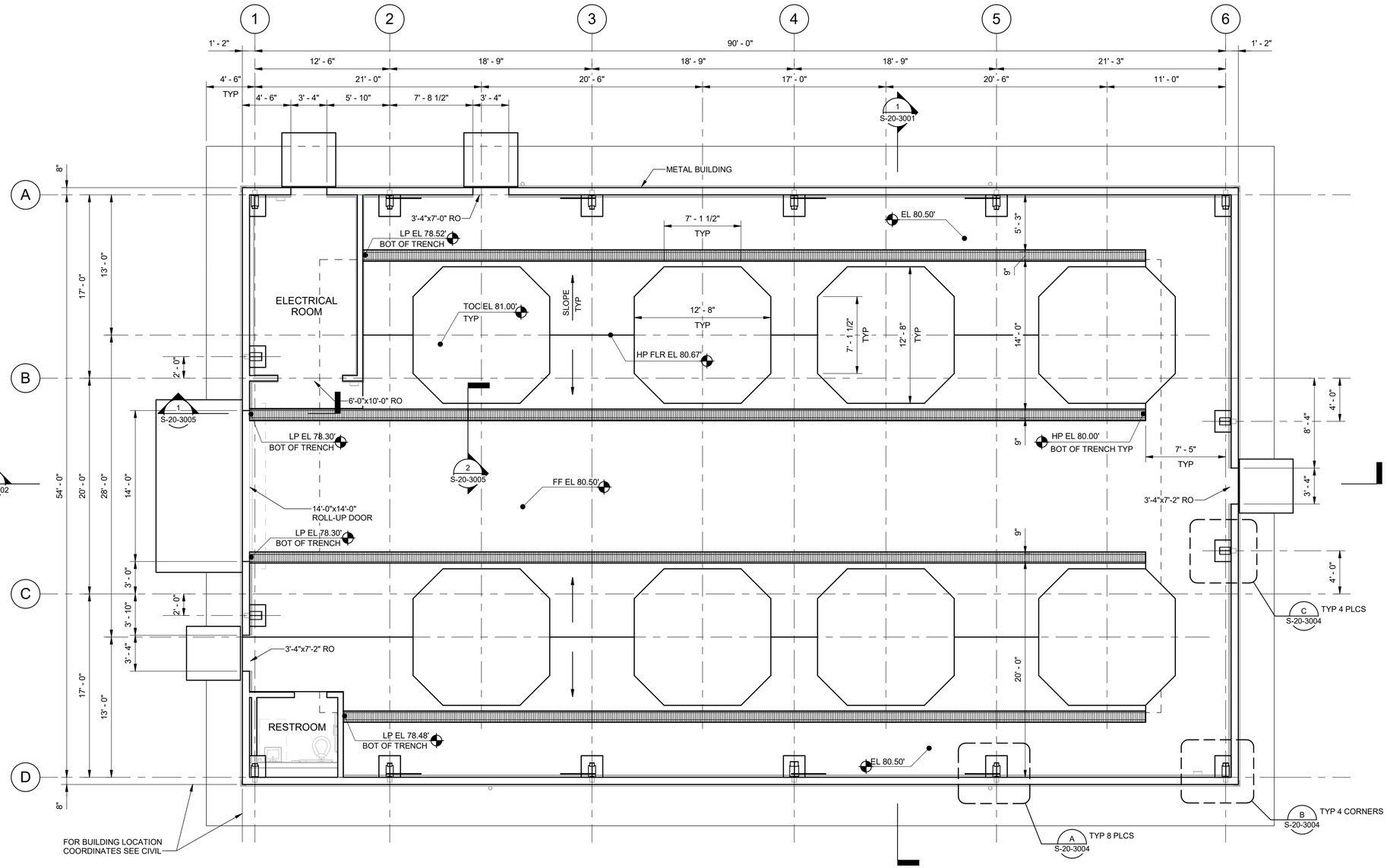

FOUNDATION PLAN

SCALE: 3/16" = 1'-0"

PLAN NORTH

Plot Date: 12/16/2020 9:44:36 AM Path: BIM 360://155452 - Sammamish Plateau PFAS Design/155452-S-20V19.rvt

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APPROVED:

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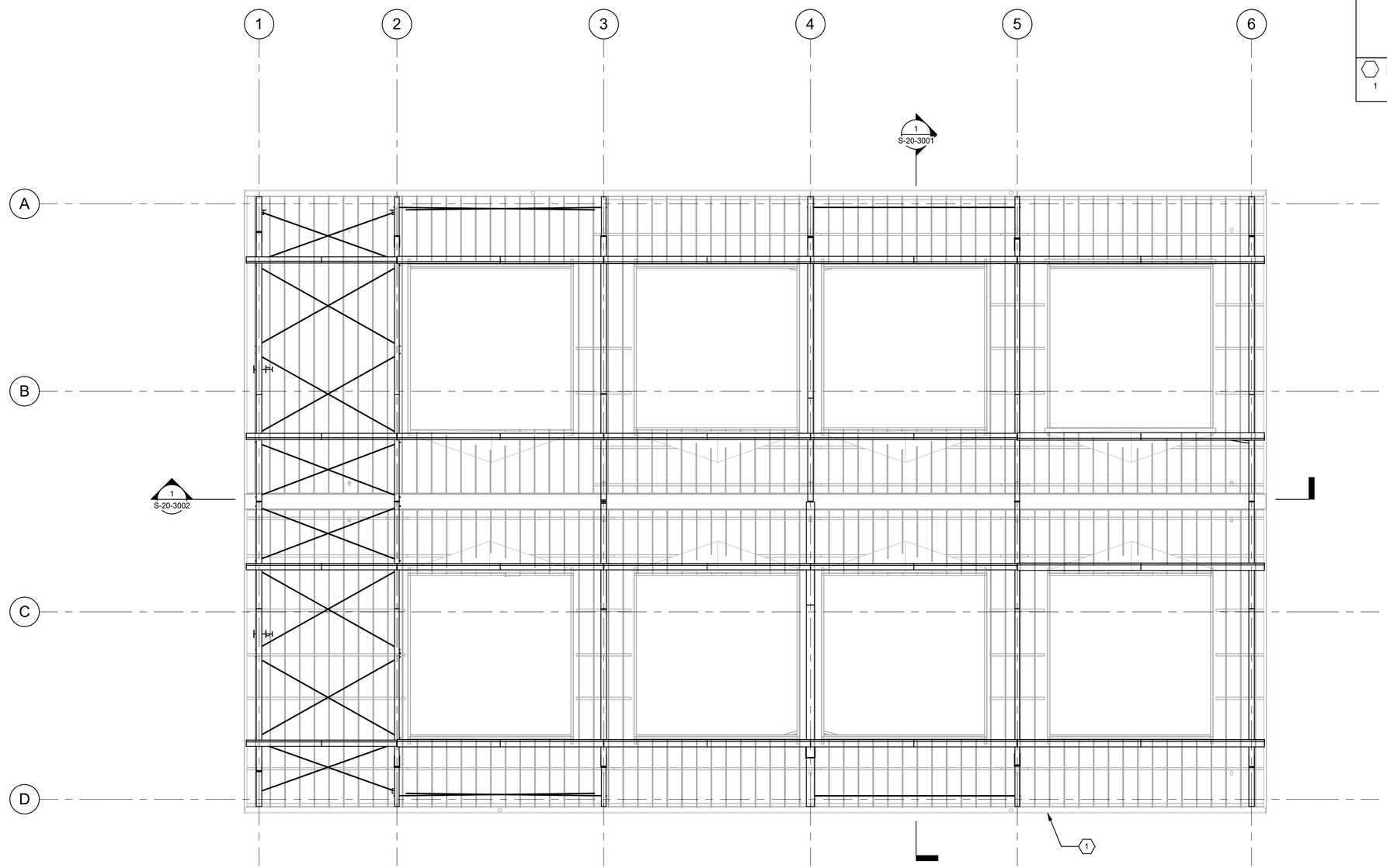
CLIENT PROJECT NUMBER XX

STRUCTURAL

GAC BUILDING FOUNDATION PLAN

DRAWING NUMBER
S-20-1001

SHEET NUMBER
OF



ROOF FRAMING PLAN

SCALE: 3/16" = 1'-0"

PLAN NORTH

GENERAL NOTES:

KEYNOTES:

1 STRUCTURE PROVIDED BY METAL BUILDING SUPPLIER, SEE SPECIFICATION SECTION 13 34 19

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CLIENT PROJECT NUMBER
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STRUCTURAL

GAC BUILDING ROOF FRAMING PLAN

DRAWING NUMBER
S-20-1002

SHEET NUMBER
OF

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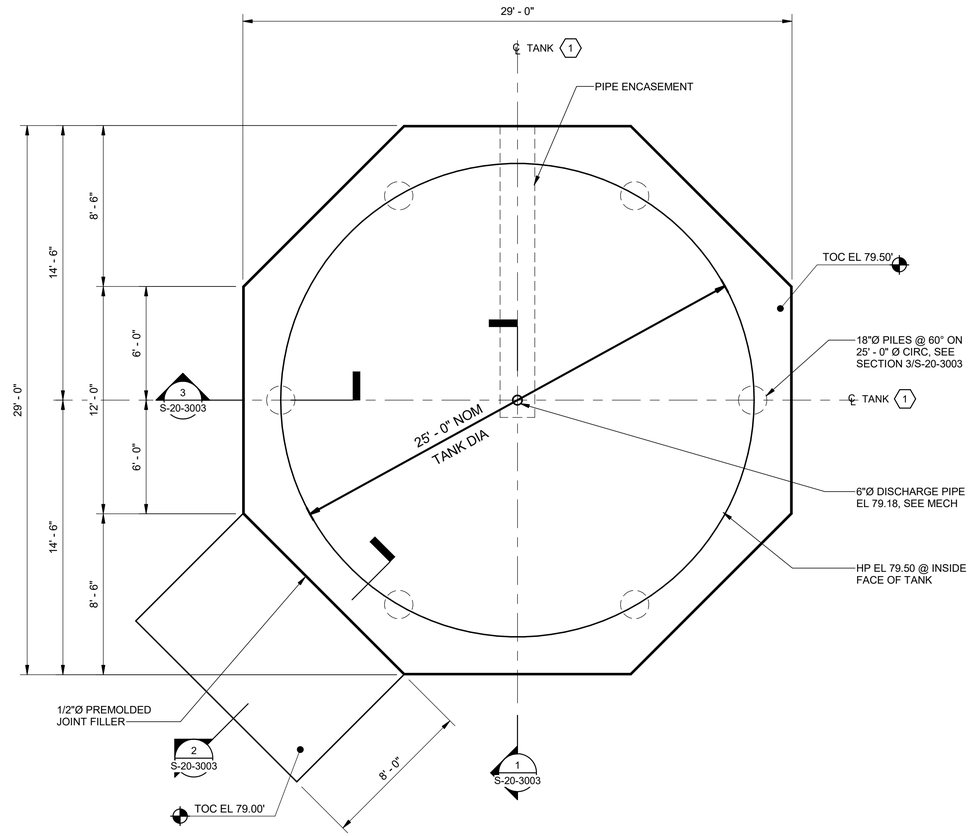
GENERAL NOTES:

KEYNOTES:

1 FOR TANK CENTERLINE COORDINATES, SEE CIVIL



BACKWASH WATER TANK FOUNDATION PLAN

SCALE: 1/4" = 1'-0"

PLAN NORTH

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Sammamish Plateau Water PFAS Project

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CHECKED:
APPROVED:

FILE NAME

BC PROJECT NUMBER 155452

CLIENT PROJECT NUMBER XX

STRUCTURAL

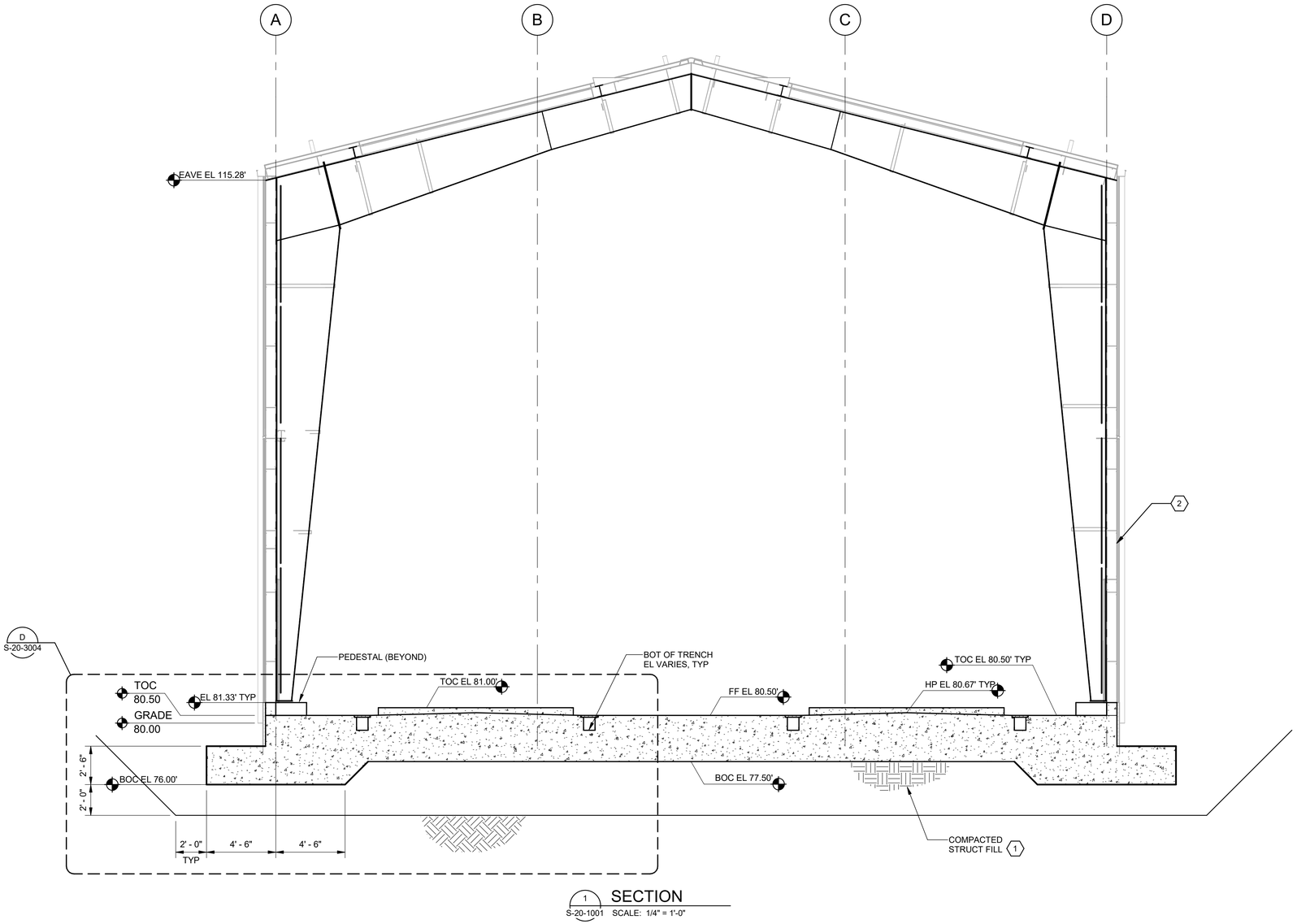
SPENT BACKWASH TANK FOUNDATION PLAN

DRAWING NUMBER

S-20-1003

SHEET NUMBER OF

Plot Date: 12/16/2020 9:44:37 AM Path: BIM 360://155452 - Sammamish Plateau PFAS Design/155452-S-20V19.rvt



1 SECTION
S-20-1001 SCALE: 1/4" = 1'-0"

GENERAL NOTES:

KEYNOTES:

1 SEE SPECIFICATION SECTION 31 23 00

2 STRUCTURE PROVIDED BY METAL BUILDING SUPPLIER, SEE SPECIFICATION SECTION 13 34 19

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APPROVED:

FILE NAME

BC PROJECT NUMBER
155452

CLIENT PROJECT NUMBER
XX

STRUCTURAL

GAC BUILDING
BUILDING CROSS
SECTIONS

DRAWING NUMBER
S-20-3001

SHEET NUMBER
OF

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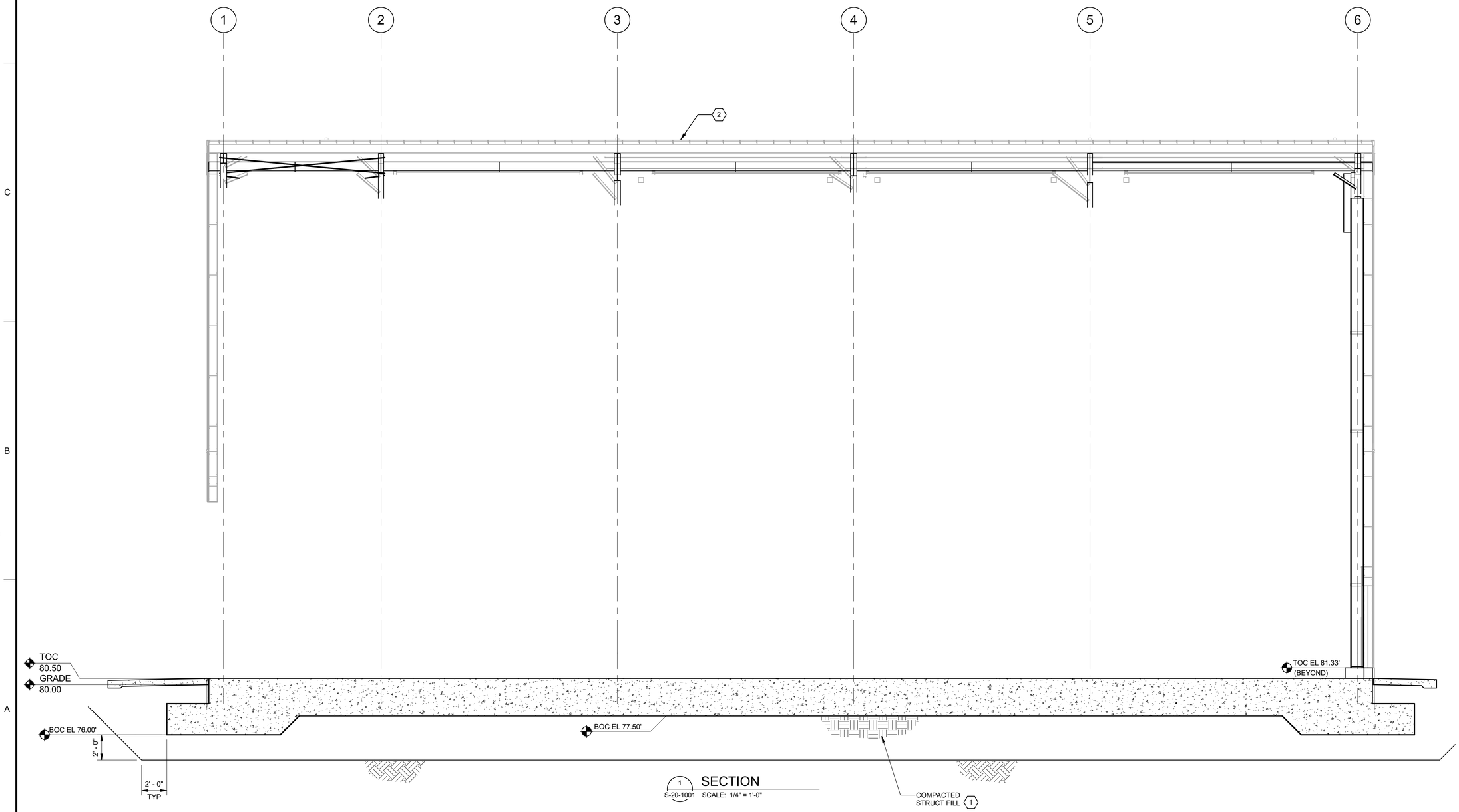
GENERAL NOTES:

KEYNOTES:

1 SEE SPECIFICATION SECTION 31 23 00

2 STRUCTURE PROVIDED BY METAL BUILDING SUPPLIER, SEE SPECIFICATION SECTION 13 34 19



1 SECTION
S-20-1001 SCALE: 1/4" = 1'-0"

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CLIENT PROJECT NUMBER
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STRUCTURAL

GAC BUILDING LONGITUDINAL SECTIONS

DRAWING NUMBER
S-20-3002

SHEET NUMBER
OF

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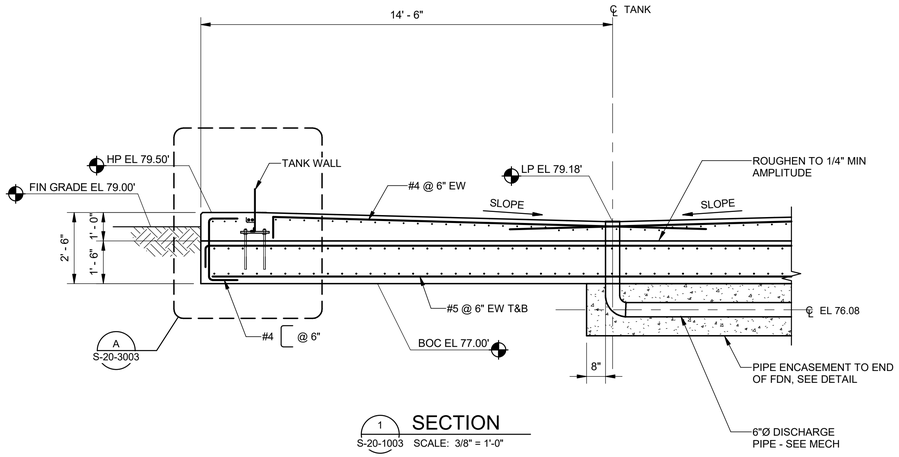
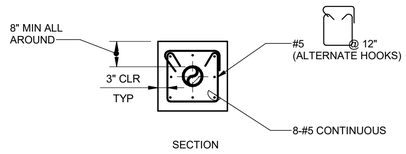


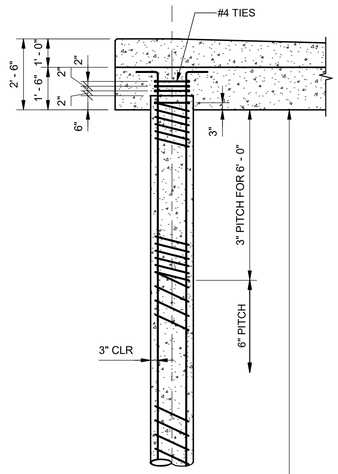
1 S-20-1003 **SECTION** SCALE: 3/8" = 1'-0"

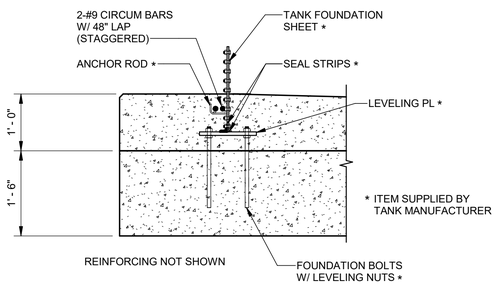


SECTION

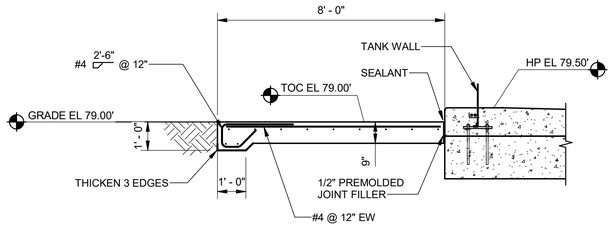
NOTES:
1. SECTION APPLIES TO PIPES W/ DIAMETERS 18" AND SMALLER.
2. WHEN PIPE ENCASEMENT IS CLOSER THAN 4" TO SLAB ABOVE, TIE SLAB AND ENCASEMENT TOGETHER.

PIPE ENCASEMENT (DIAMETER ≤18")

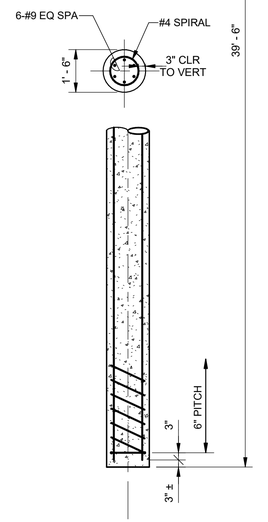




A S-20-3003 **DETAIL** SCALE: 3/4" = 1'-0"



2 S-20-1003 **SECTION** SCALE: 3/8" = 1'-0"



3 S-20-1003 **SECTION** SCALE: 3/8" = 1'-0"

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REVISIONS

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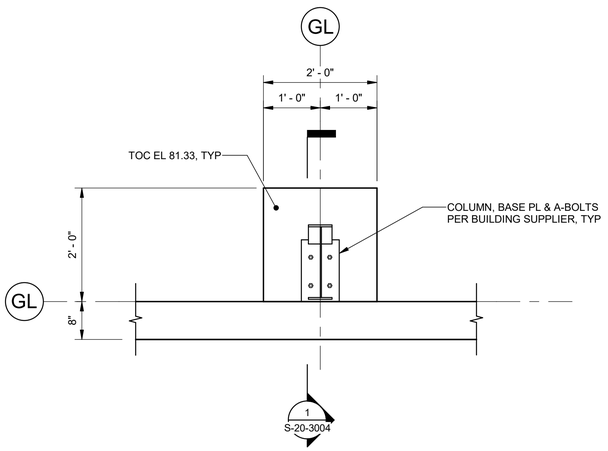
FILE NAME
BC PROJECT NUMBER 155452
CLIENT PROJECT NUMBER XX

STRUCTURAL

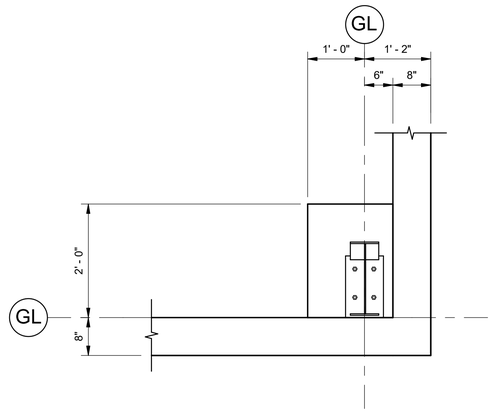
SPENT BACKWASH TANK SECTIONS AND DETAILS

DRAWING NUMBER
S-20-3003
SHEET NUMBER
OF

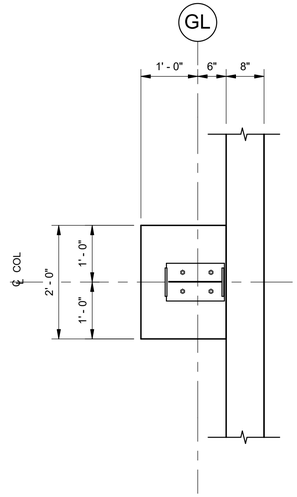
Plot Date: 12/16/2020 9:44:39 AM Path: BIM 360://155452 - Sammamish Plateau PFAS Design/155452-S-20V19.rvt



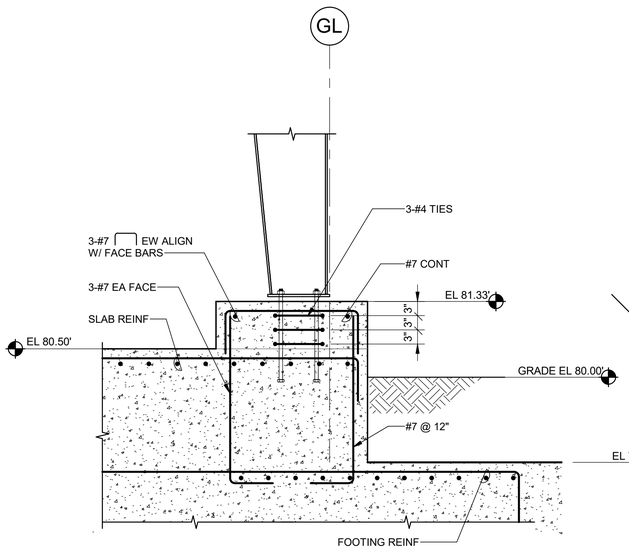
A DETAIL
S-20-1001 SCALE: 3/4" = 1'-0"



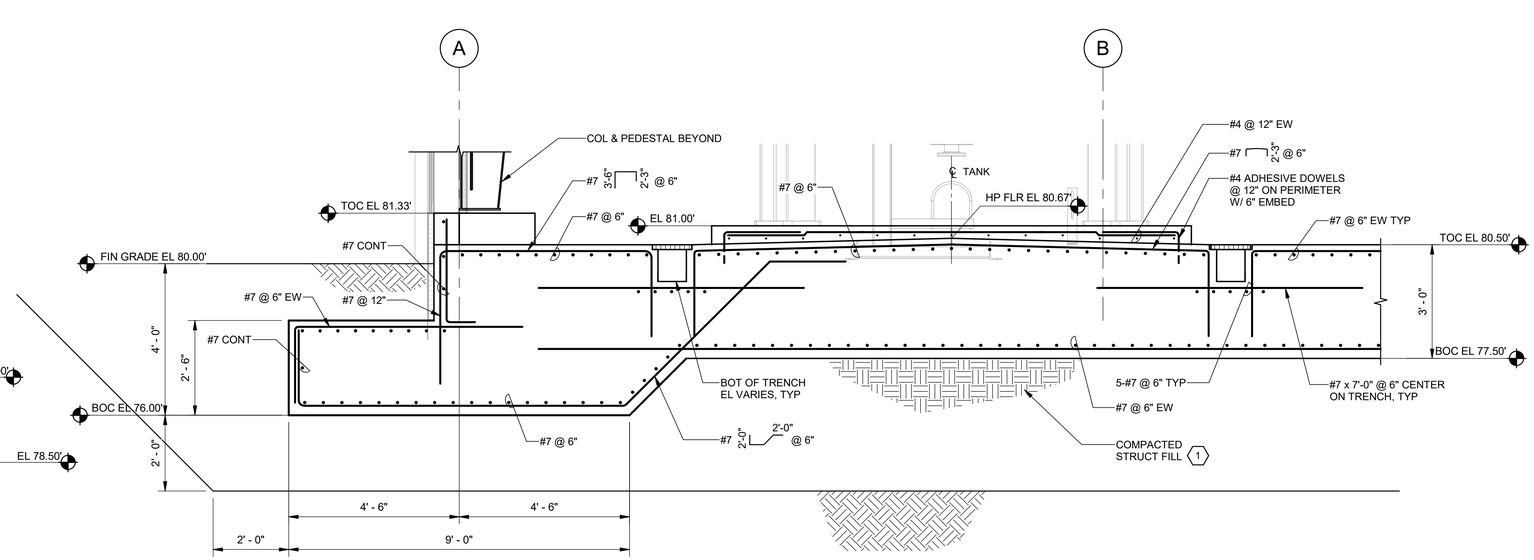
B DETAIL
S-20-1001 SCALE: 3/4" = 1'-0"



C DETAIL
S-20-1001 SCALE: 3/4" = 1'-0"



1 SECTION
S-20-3004 SCALE: 3/4" = 1'-0"



D DETAIL
S-20-3001 SCALE: 1/2" = 1'-0"

GENERAL NOTES:

KEYNOTES:
1 SEE SPECIFICATION SECTION 31 23 00

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Sammamish
Plateau Water
PFAS Project

REVISIONS

REV	DATE	DESCRIPTION

LINE IS 2 INCHES
AT FULL SIZE

DESIGNED: R.MANTZ
DRAWN: M.GISSE
CHECKED:
CHECKED:
APPROVED:

FILE NAME

BC PROJECT NUMBER
155452

CLIENT PROJECT NUMBER
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STRUCTURAL

GAC BUILDING FOUNDATION SECTIONS AND DETAILS 1

DRAWING NUMBER
S-20-3004

SHEET NUMBER
OF

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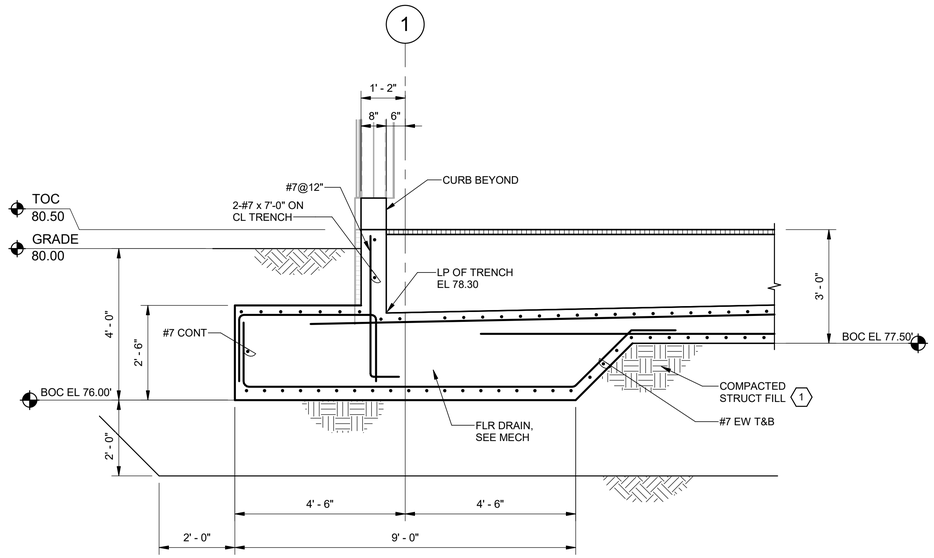
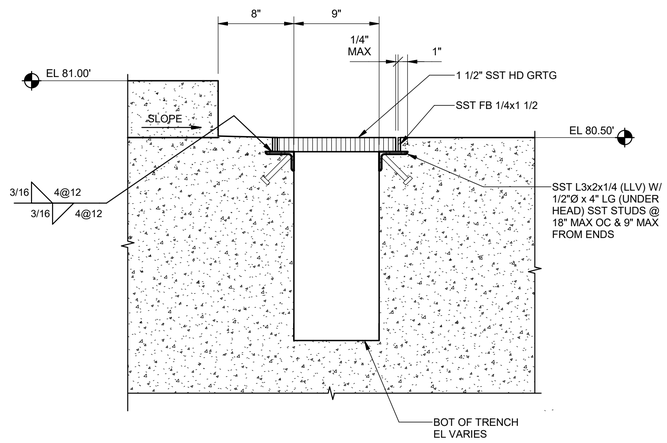


1 SECTION
S-20-1001 SCALE: 1/2" = 1'-0"



2 SECTION
S-20-1001 SCALE: 1 1/2" = 1'-0"

GENERAL NOTES:

KEYNOTES:

1 SEE SPECIFICATION SECTION 31 23 00

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PFAS Project

REVISIONS

REV	DATE	DESCRIPTION

LINE IS 2 INCHES
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DRAWN: M.GISSE
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APPROVED:

FILE NAME

BC PROJECT NUMBER
155452

CLIENT PROJECT NUMBER
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STRUCTURAL

GAC BUILDING FOUNDATION SECTIONS AND DETAILS 2

DRAWING NUMBER
S-20-3005

SHEET NUMBER
OF

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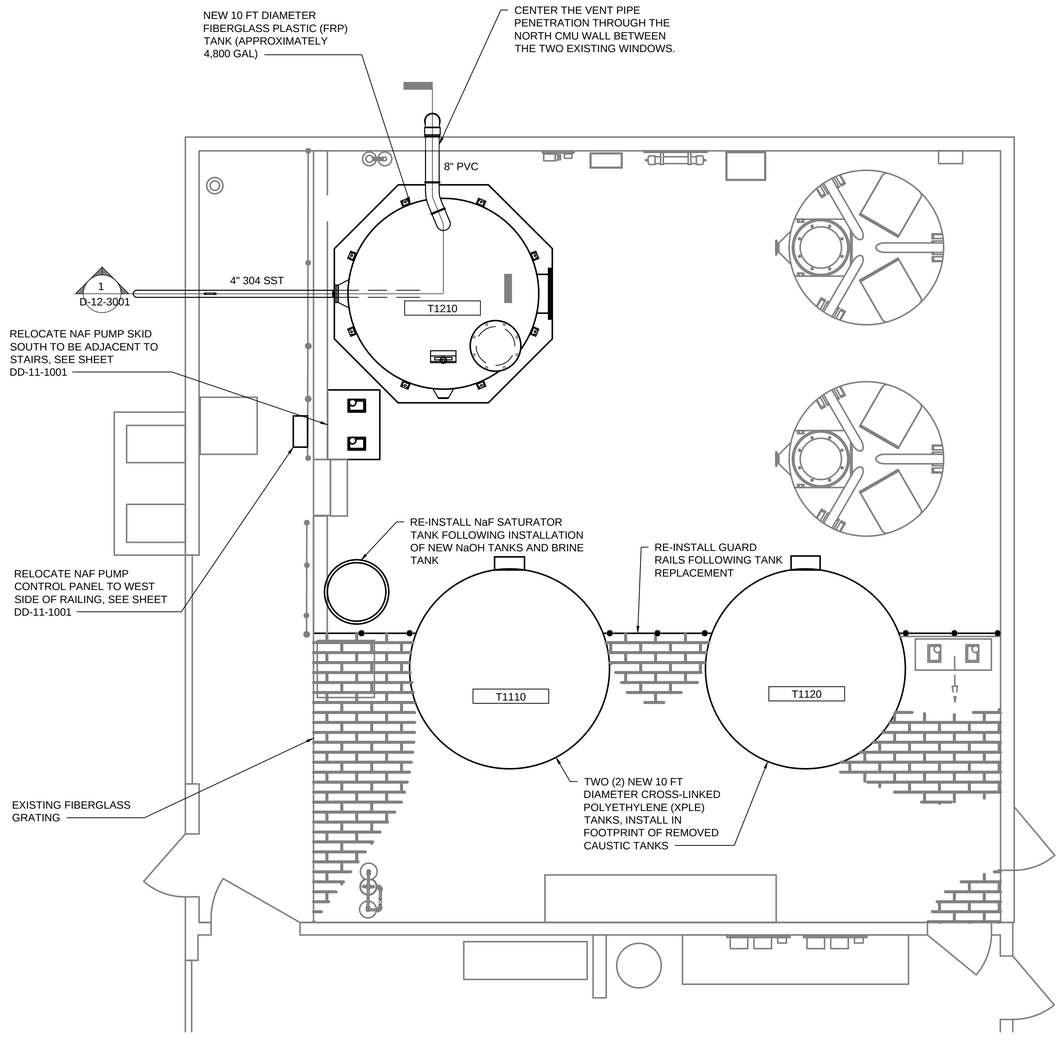

WELL 9 CHEMICAL ROOM PLAN

SCALE: NTS

NORTH

GENERAL NOTES:

1. -

KEY NOTES:

KEY PLAN

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Sammamish Plateau Water

Sammamish Plateau Water PFAS Project

REVISIONS

REV	DATE	DESCRIPTION

LINE IS 2 INCHES AT FULL SIZE

DESIGNED: D.ROTH
DRAWN: T.LEMON
CHECKED:
CHECKED:
APPROVED:

FILENAME
D-11-1001.dwg

BC PROJECT NUMBER
155452

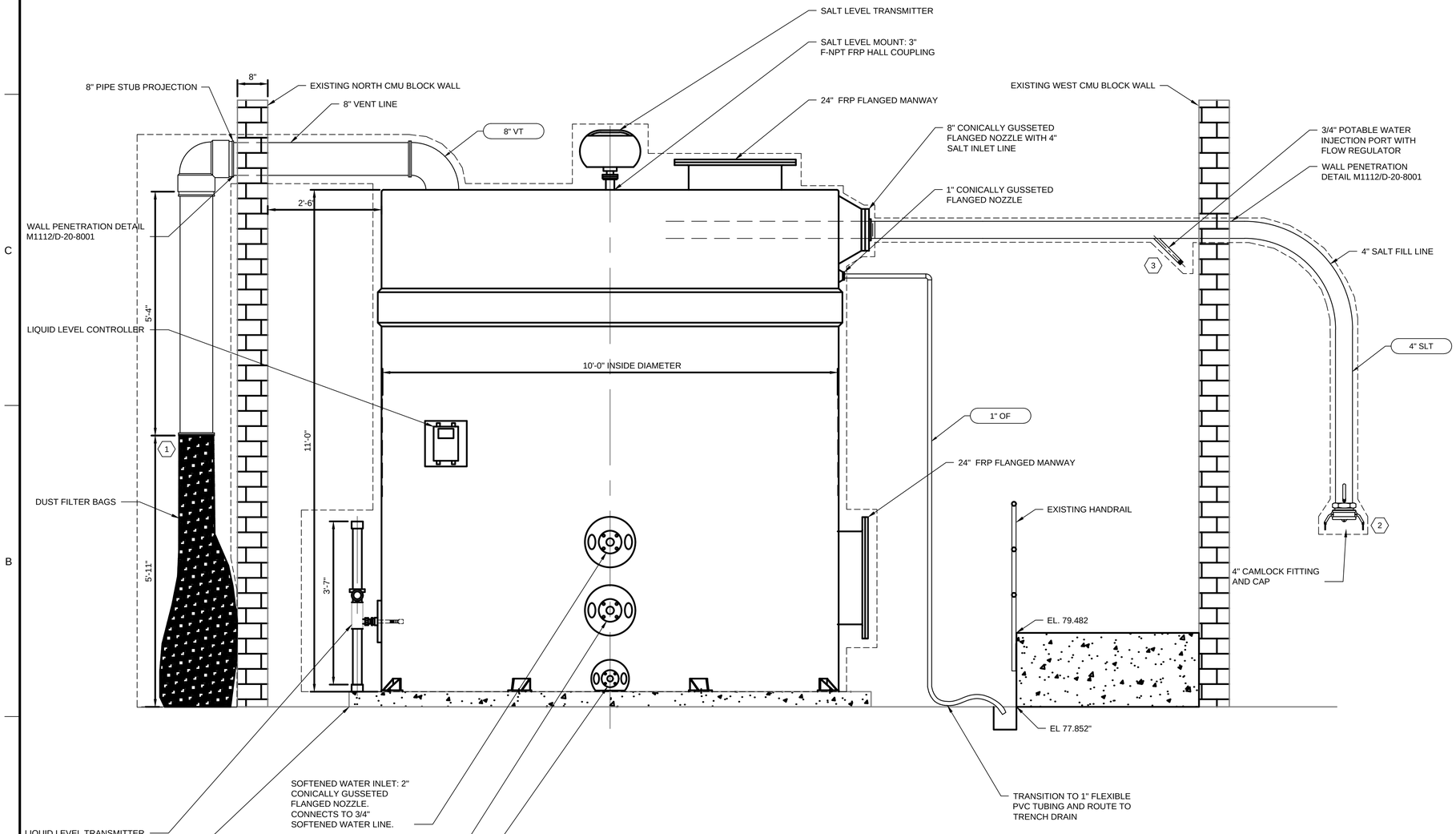
CLIENT PROJECT NUMBER

PROCESS

WELL 9 CHEMICAL ROOM PLAN

DRAWING NUMBER
D-11-1001

SHEET NUMBER
OF



1 D-11-1001 BRINE TANK SECTION
SCALE: 1/16" = 1'-0"

GENERAL NOTES:

1. -

KEY NOTES:

1. VENDOR-SUPPLIED POLYESTER DUST BAG WITH RUBBER CONNECTION BOOT
2. DASHED BOUNDARY INDICATES LIMIT OF VENDOR-SUPPLIED EQUIPMENT INCLUDED WITH THE SALT BRINE TANK SYSTEM
3. CONNECT TO NEW 3/4" SFW LINE, SEE SHEET D-12-4001

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CHECKED:
APPROVED:

FILENAME
D-12-3001.dwg

BC PROJECT NUMBER
155452

CLIENT PROJECT NUMBER

PROCESS

BRINE TANK PIPING SECTION

DRAWING NUMBER
D-12-3001

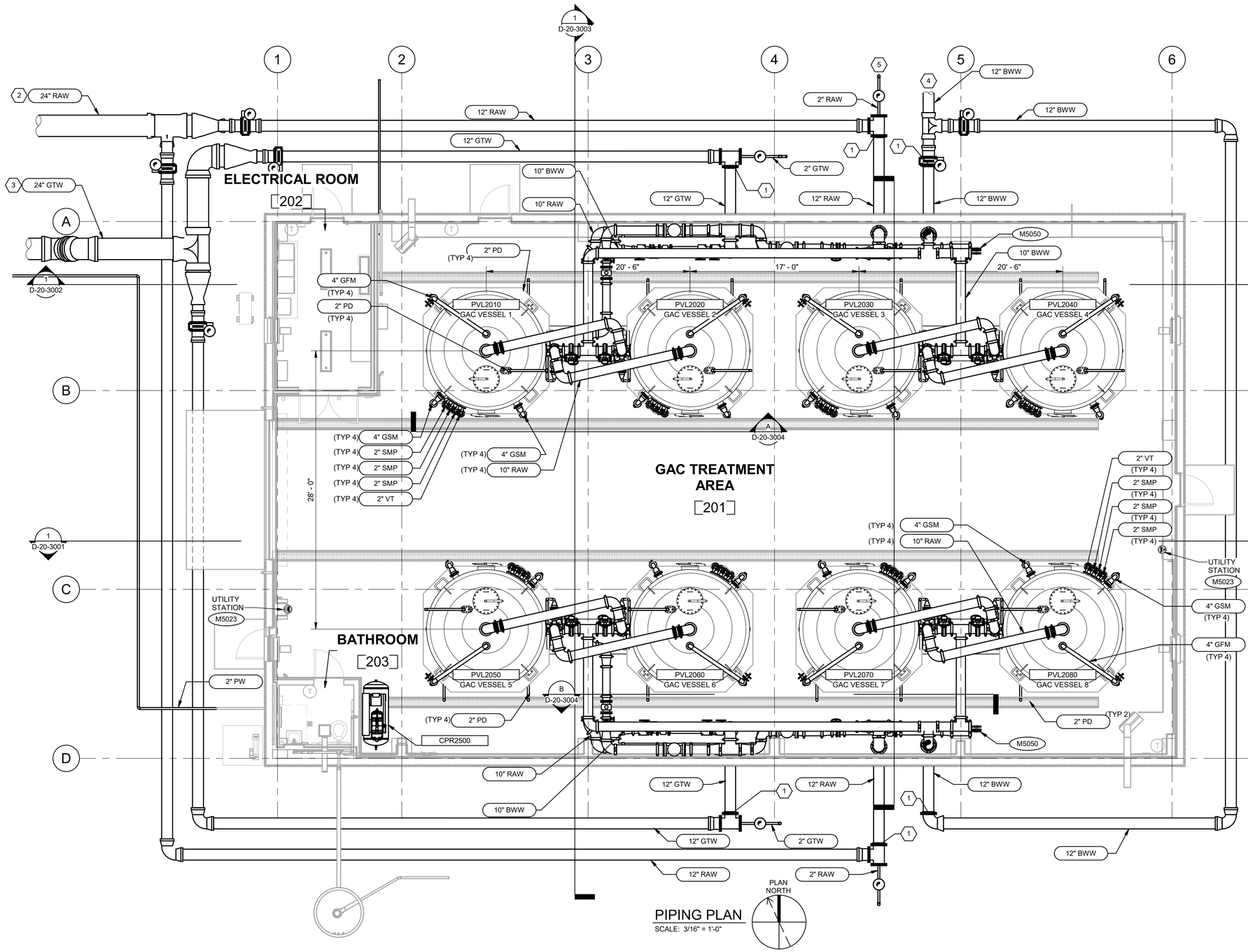
SHEET NUMBER
OF

GENERAL NOTES:

1. INSTRUMENT AIR PIPING IS NOT SHOWN. INSTRUMENT AIR PIPING TO BE ROUTED BY CONTRACTOR.
2. ALL PIPE FLOOR PENETRATIONS ARE M1103, SEE D-20-8001.
3. PIPING SHALL BE PROVIDED WITH FLEXIBILITY WITH SPECIFICATION SECTION 40 05 06.3.01.
4. FOR CLARITY, PIPE LABELS REPRESENT TYPICALS FOR A ROW OF GAC VESSELS.

KEYNOTES:

1. MATERIAL TRANSITION FROM CARBON STEEL PIPE TO DUCTILE IRON PIPE AT FLANGE. SEE SPECIFICATION 40 05 02.41.
2. FOR CONTINUATION, SEE CIVIL RAW PLAN AND PROFILE, C-00-6001.
3. FOR CONTINUATION, SEE CIVIL GTW PLAN AND PROFILE, C-00-6002.
4. FOR CONTINUATION, SEE CIVIL BWW PIPE PLAN AND PROFILE, C-00-6003.
5. TYPE II BLOW-OFF ASSEMBLY , TYP OF 4, SEE SHEET C-00-8004.



PIPING PLAN

SCALE: 3/16" = 1'-0"

Brown AND Caldwell

90% DESIGN

Sammamish Plateau Water

Sammamish Plateau Water
PFAS Design

REVISIONS

REV	DATE	DESCRIPTION

LINE IS 2 INCHES AT FULL SIZE

DESIGNED: L.STEPHENS
DRAWN: T.LEMON
CHECKED:
CHECKED:
APPROVED:

FILE NAME

BC PROJECT NUMBER
155452

CLIENT PROJECT NUMBER
XX

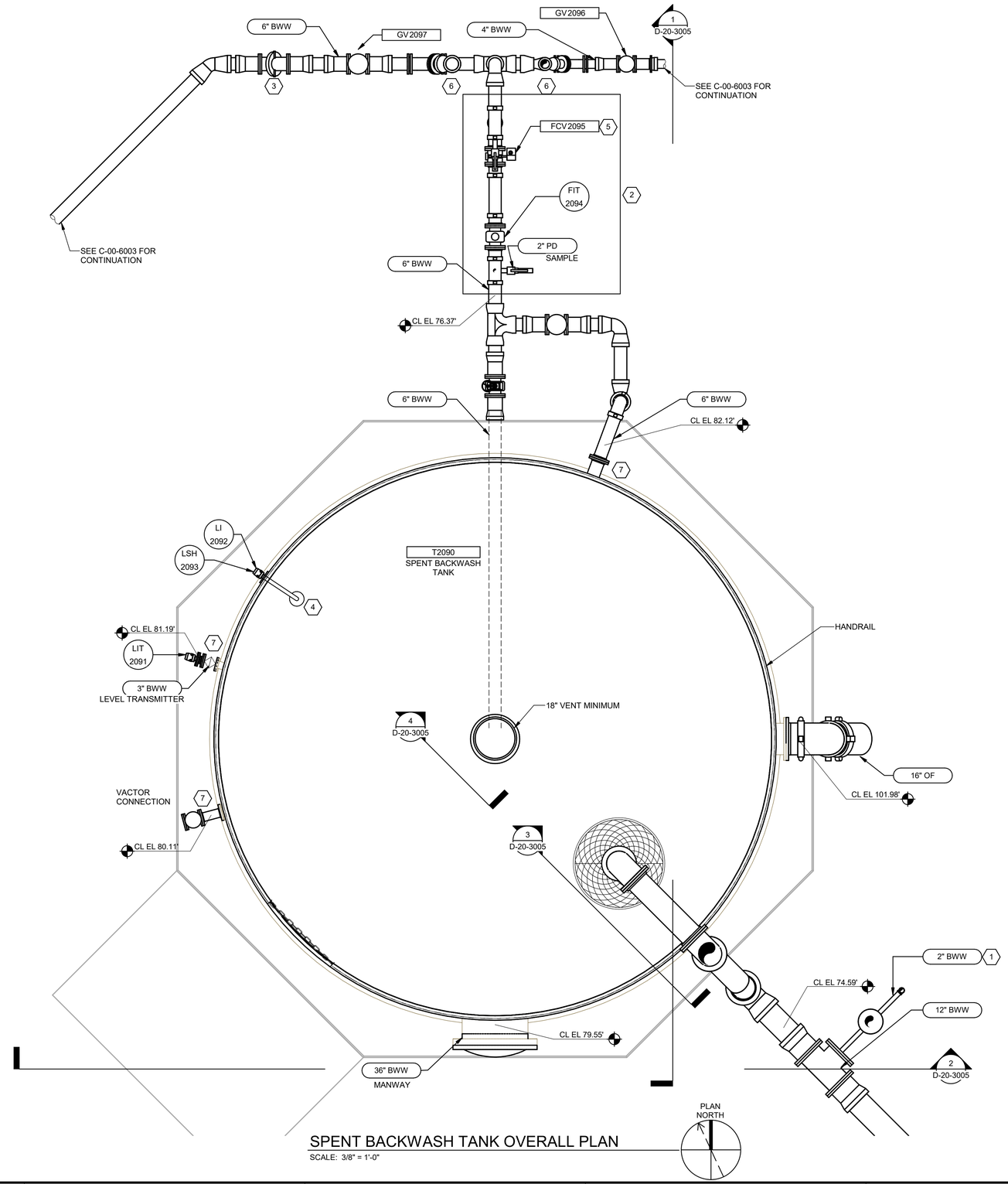
PROCESS

GAC BUILDING OVERALL PLAN

DRAWING NUMBER
D-20-1001

SHEET NUMBER
OF

Plot Date: 12/17/2020 9:28:59 AM Path: BIM 360://155452 - Sammamish Plateau PFAS Design/155452-D-20V19.rvt



SPENT BACKWASH TANK OVERALL PLAN

SCALE: 3/8" = 1'-0"

GENERAL NOTES:

1. TANK PIPE PENETRATIONS DESCRIBED IN SPEC 43 41 11.

KEYNOTES:

1. 2-INCH BLOWOFF ASSEMBLY FOR DRAINING INLET 12" BWW.
2. EQUIPMENT, VALVING, AND PIPING INSIDE BOX WILL BE LOCATED IN BACKWASH FLOW CONTROL VAULT. VAULT DIMENSIONS ARE SHOWN ON C-20-8001.
3. INLINE ELASTOMERIC CHECK VALVE, SEE SECTION 40 05 65.35.
4. FLOAT AND TAPE GAUGEBOARD INDICATOR FOR LEVEL MEASUREMENT NOT SHOWN.
5. PROVIDE ACTUATOR WITH A LOCAL CONTROL STATION (CS) WITH DEVICES SPECIFIED IN SECTION 40 05 57.23.
6. CLEANOUTS PER DETAIL F ON C-00-8005.
7. ABOVEGROUND PIPING TO BE HEAT TRACED PER 40 41 13.13.

Brown AND Caldwell

90% DESIGN

Sammamish Plateau Water

Sammamish Plateau Water
PFAS Design

REVISIONS

REV	DATE	DESCRIPTION

LINE IS 2 INCHES AT FULL SIZE

DESIGNED: L.STEPHENS
DRAWN: T.LEMON
CHECKED:
CHECKED:
APPROVED:
FILE NAME
BC PROJECT NUMBER 155452
CLIENT PROJECT NUMBER XX

PROCESS

SPENT BACKWASH TANK OVERALL PLAN

DRAWING NUMBER
D-20-1002

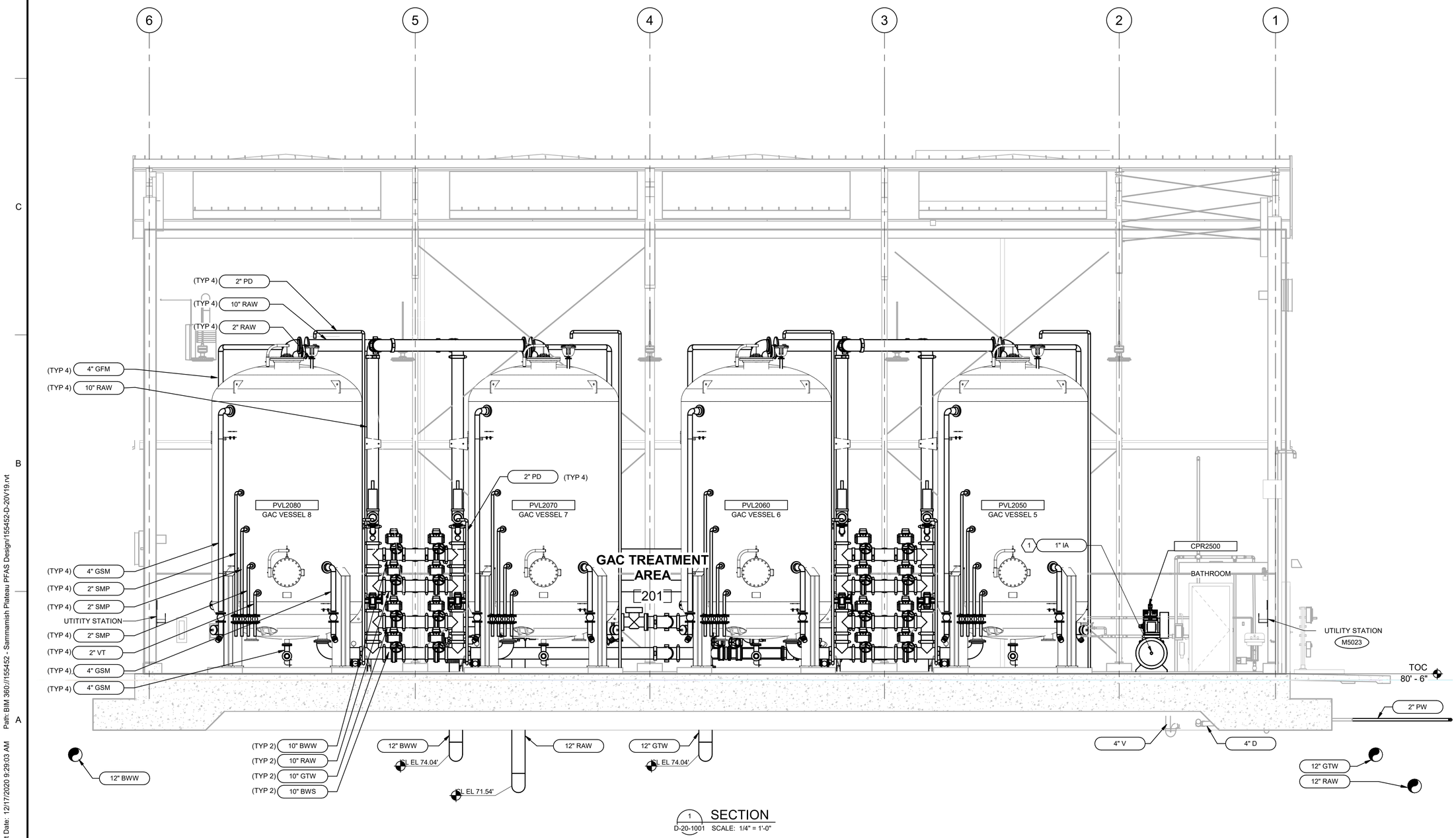
SHEET NUMBER
OF

Plot Date: 12/16/2020 5:05:12 PM Path: BIM 360://155452 - Sammamish Plateau PFAS Design/155452-D-20V19.rvt

GENERAL NOTES:

KEYNOTES:

1. INSTRUMENT AIR PIPING TO BE ROUTED BY CONTRACTOR.



1 D-20-1001 SECTION SCALE: 1/4" = 1'-0"

Brown AND Caldwell

90% DESIGN

Sammamish Plateau Water

Sammamish Plateau Water
PFAS Design

REVISIONS

REV	DATE	DESCRIPTION

LINE IS 2 INCHES AT FULL SIZE

DESIGNED: L.STEPHENS
DRAWN: T.LEMON
CHECKED:
CHECKED:
APPROVED:

FILE NAME

BC PROJECT NUMBER
155452

CLIENT PROJECT NUMBER
XX

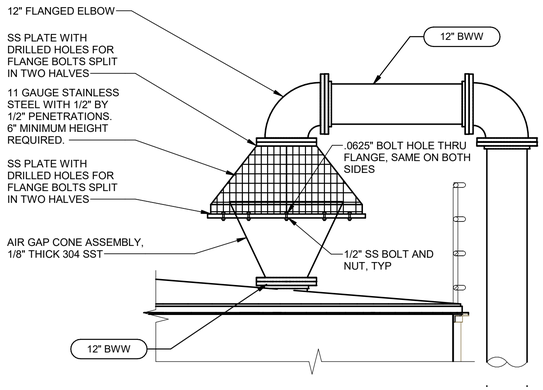
PROCESS

GAC TREATMENT SECTION 1

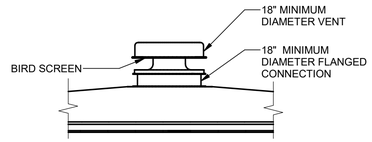
DRAWING NUMBER
D-20-3001

SHEET NUMBER
OF

Plot Date: 12/17/2020 9:29:03 AM Path: BIM 360://155452 - Sammamish Plateau PFAS Design/155452-D-20V19.rvt



3 AIR GAP SECTION
D-20-1002 SCALE: 1/2" = 1'-0"



4 TANK VENT SECTION
D-20-1002 SCALE: 1/2" = 1'-0"

1 BACKWASH WASH WATER TANK SECTION 1
D-20-1002 SCALE: 1/4" = 1'-0"

2 BACKWASH WASH WATER TANK SECTION 2
D-20-1002 SCALE: 1/4" = 1'-0"

GENERAL NOTES:

1. AIR GAP TO BE FORMED BY CONTACTOR.
2. AIR GAP DOES NOT SUPPORT 12" BWW PIPE. 12" BWW TO BE SEPARATELY SUPPORTED.
3. SLOPED BOTTOM ON SPENT BACKWASH TANK NOT SHOWN, SEE S-20-3003 FOR DETAILS.

KEYNOTES:

1. PROVIDE PIPING HIGH POINT DOWNSTREAM OF MAGNETIC FLOW METER TO MAINTAIN FILLED FLOW TUBE WITHIN MAGNETIC FLOW METER.
2. PROVIDE BIRD SCREEN ON OUTLET OF 16" OF PIPE.
3. 2" BWW BLOWOFF ASSEMBLY.

Brown AND Caldwell

90% DESIGN

Sammamish Plateau Water

Sammamish Plateau Water
PFAS Design

REVISIONS

REV	DATE	DESCRIPTION

LINE IS 2 INCHES AT FULL SIZE

DESIGNED: L.STEPHENS
DRAWN: T.LEMON
CHECKED:
CHECKED:
APPROVED:
FILE NAME
BC PROJECT NUMBER 155452
CLIENT PROJECT NUMBER XX

PROCESS

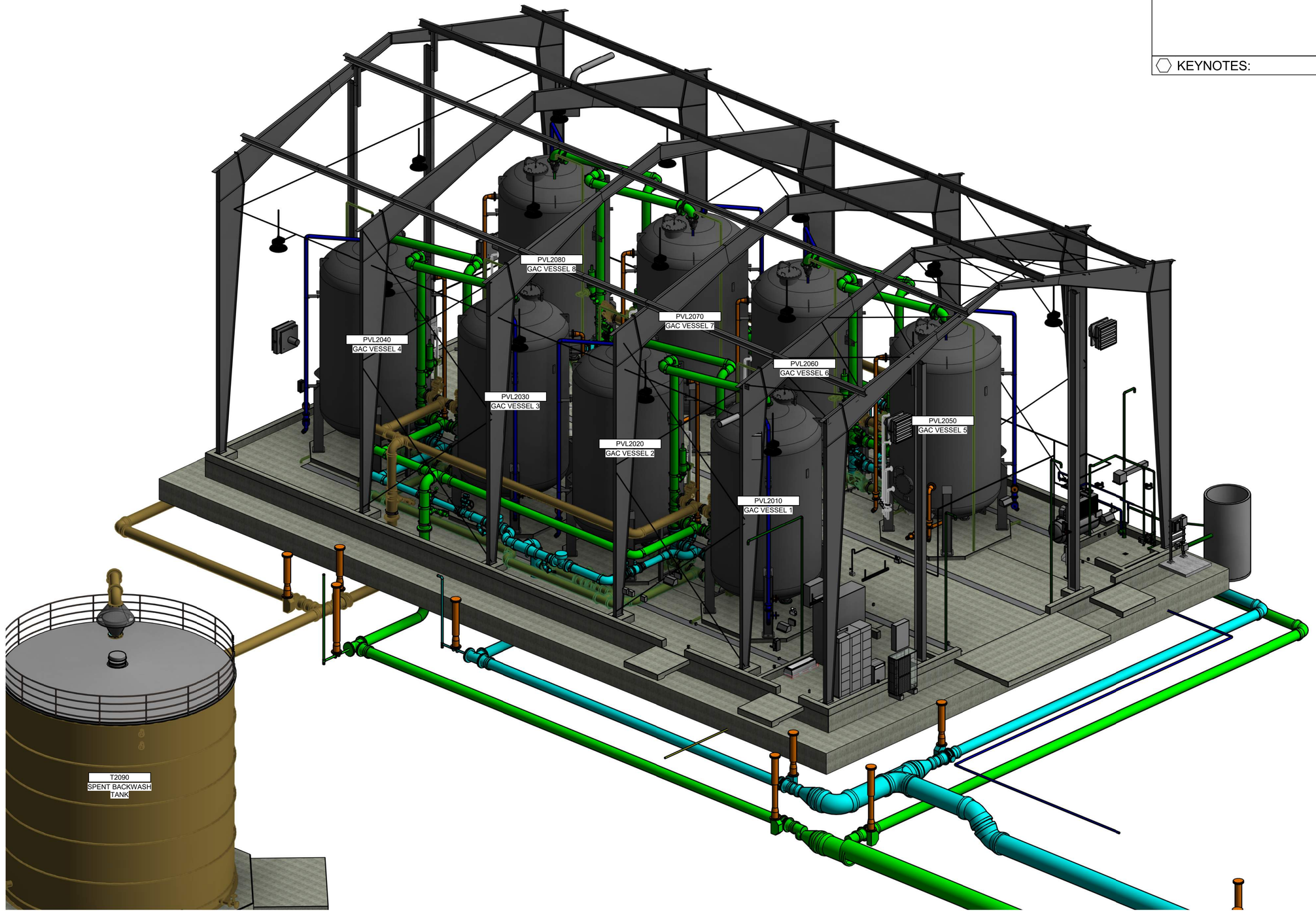
SPENT BACKWASH TANK SECTIONS

DRAWING NUMBER
D-20-3005
SHEET NUMBER
OF

Plot Date: 12/17/2020 7:01:25 AM Path: BIM 360://155452 - Sammamish Plateau PFAS Design/155452-D-20V19.rvt

GENERAL NOTES:

KEYNOTES:



ISOMETRIC VIEW

Brown AND Caldwell

90% DESIGN

Sammamish Plateau Water

Sammamish Plateau Water
PFAS Design

REVISIONS		
REV	DATE	DESCRIPTION

LINE IS 2 INCHES
AT FULL SIZE

DESIGNED: L.STEPHENS
DRAWN: T.LEMON
CHECKED:
CHECKED:
APPROVED:

FILE NAME

BC PROJECT NUMBER
155452

CLIENT PROJECT NUMBER
XX

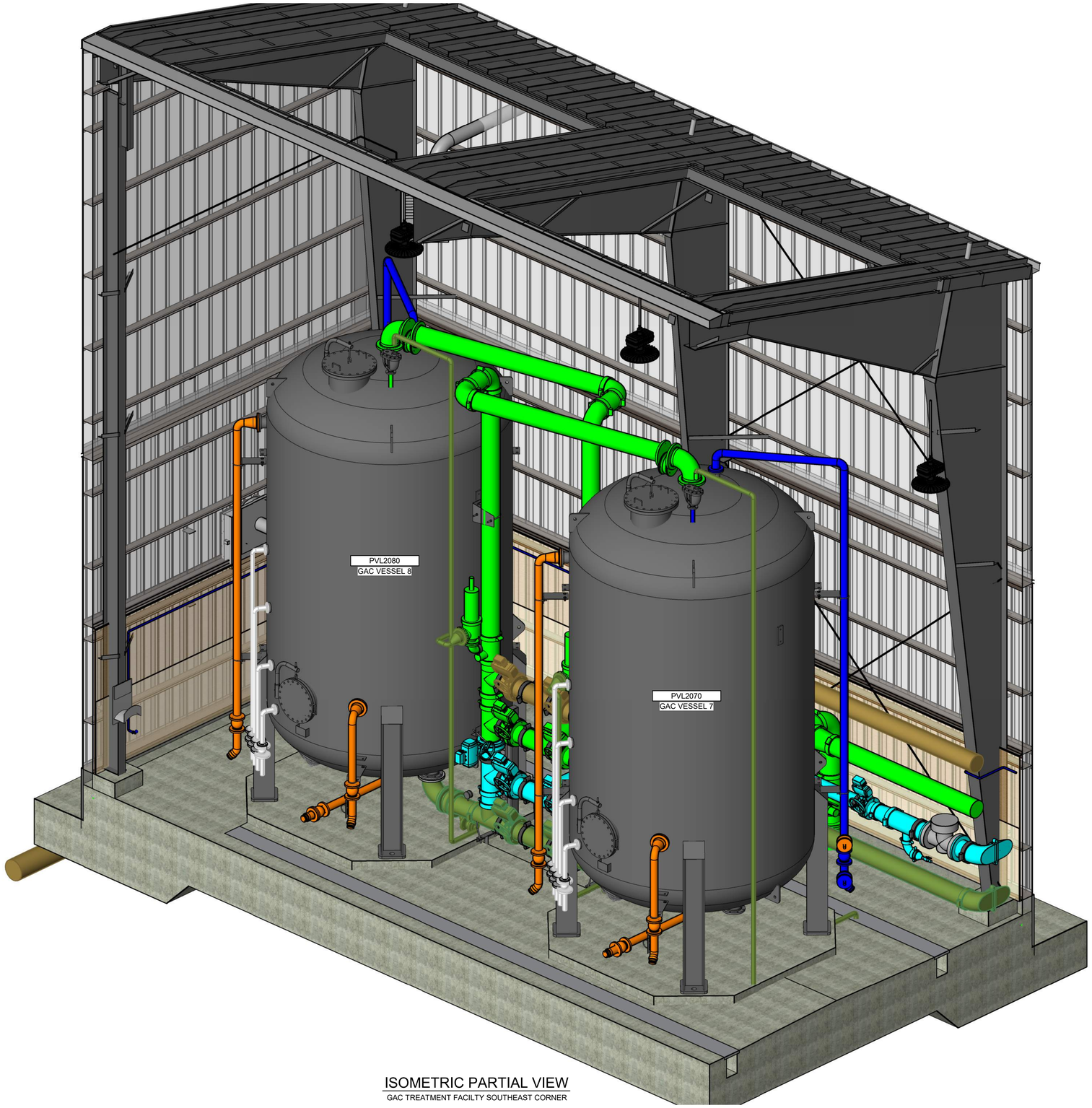
PROCESS

GAC TREATMENT
ISOMETRIC VIEW 1

DRAWING NUMBER
D-20-9001

SHEET NUMBER
OF

Plot Date: 12/17/2020 9:31:01 AM Path: BIM 360://155452 - Sammamish Plateau PFAS Design/155452-D-20V19.rvt



ISOMETRIC PARTIAL VIEW
GAC TREATMENT FACILTY SOUTHEAST CORNER

GENERAL NOTES:

KEYNOTES:

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Sammamish Plateau Water

Sammamish Plateau Water
PFAS Design

REVISIONS

REV	DATE	DESCRIPTION

LINE IS 2 INCHES
AT FULL SIZE

DESIGNED:	L.STEPHENS
DRAWN:	T.LEMON
CHECKED:	
CHECKED:	
APPROVED:	

FILE NAME

BC PROJECT NUMBER
155452

CLIENT PROJECT NUMBER
XX

PROCESS

GAC TREATMENT
ISOMETRIC VIEW 2

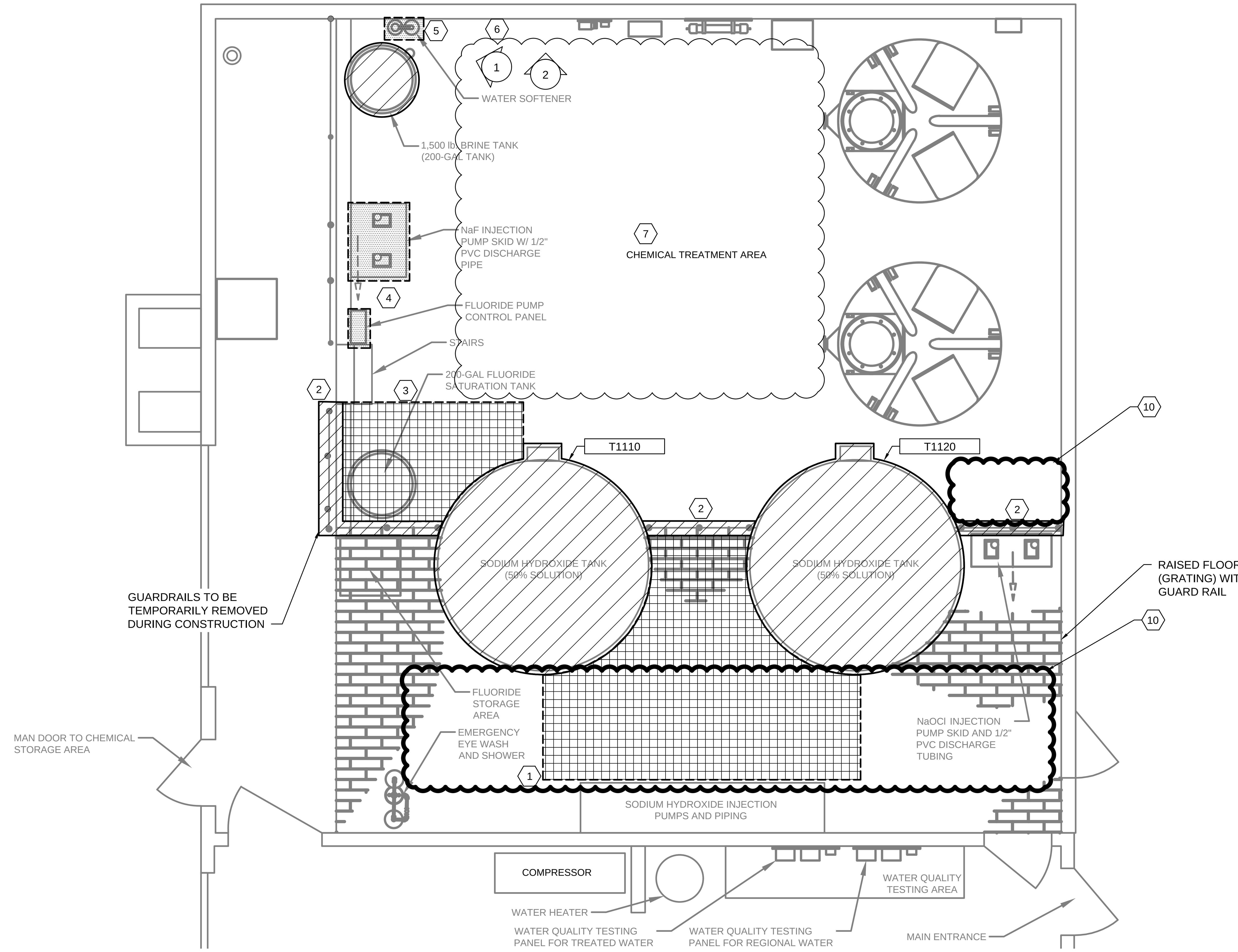
DRAWING NUMBER
D-20-9002

SHEET NUMBER
OF

Plot Date: 12/17/2020 9:31:14 AM Path: BIM 360://155452 - Sammamish Plateau PFAS Design/155452-D-20V19.rvt

SEQUENCE OF CONSTRUCTION:

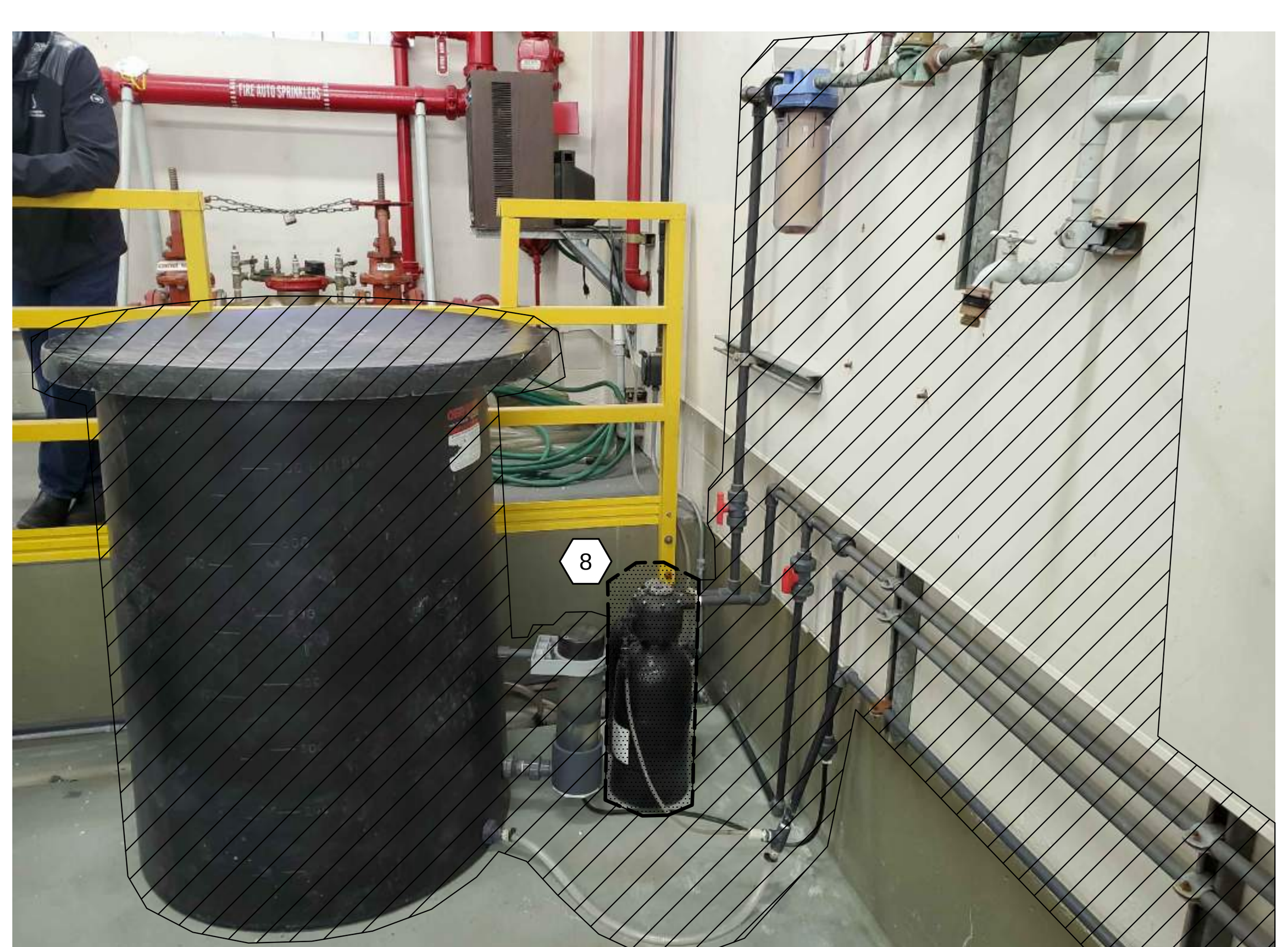
1. INSTALL TEMPORARY CHEMICAL TOTES AND TEMPORARY PIPING TO SUPPLY CAUSTIC SODA FEED PUMPS FROM TOTES. TRANSFER REMAINING CAUSTIC SODA FROM TANKS 1110 AND 1120 TO TEMPORARY CHEMICAL TOTES. SEE KEY NOTE 7.
2. DISASSEMBLE AND REMOVE FLUORIDE TANKS, HANDRAILS, AND GRATING TO FACILITATE DEMOLITION OF TANKS 1110 AND 1120. SEE KEY NOTES 2 AND 3.
3. DEMO AND REMOVE TANKS 1110 AND 1120.
4. PATCH EXISTING CONCRETE COATING BELOW FIBERGLASS GRATING AND NEAR HYPO PUMP SKID PER SPEC 90 00 90 AND 90 90 06. SEE PLAN FOR GENERAL AREA WHERE FLOORING PATCH IS REQUIRED. CONTRACTOR TO ATTEND PREBID MEETING TO CONFIRM EXTENT AND METHODS PRIOR TO BID.
5. INSTALL NEW CAUSTIC SODA TANK 1120. SEE SHEET D-11-1001.
6. REPLACE EXISTING PVC PIPING BETWEEN CAUSTIC SODA TANK 1120 AND THE STAINLESS STEEL PIPING ON SUCTION SIDE OF CAUSTIC SODA FEED PUMPS. VERIFY TANK 1120 AND NEW PVC PIPING ARE FUNCTIONAL.
7. TRANSFER REMAINING CAUSTIC SODA FROM TEMPORARY CHEMICAL TOTES TO NEW TANK 1120. REMOVE TEMPORARY CHEMICAL TOTES.
8. RELOCATE EXISTING FLUORIDE PUMP SKID AND CONTROL PANEL. SEE SHEET D-11-1001.
9. REMOVE EXISTING SALT BRINE TANK AND DEMO POTABLE WATER, SOFTENED WATER, AND BRINE PIPING AS INDICATED IN BRINE PIPING DETAIL ON SHEET D-12-4001. RELOCATE EXISTING WATER SOFTENERS.
10. INSTALL NEW SALT BRINE TANK. SEE SHEET D-11-1001.
11. INSTALL NEW CAUSTIC SODA TANK 1110. SEE SHEET D-11-1001.
12. REPLACE EXISTING PVC PIPING BETWEEN CAUSTIC SODA TANK 1110 AND THE STAINLESS STEEL PIPING ON THE SUCTION SIDE OF THE CAUSTIC SODA FEED PUMPS.
13. REPLACE EXISTING CAUSTIC SODA TRANSFER PIPING, TANK VENT PIPING, AND TANK OVERFLOW PIPING. SEE SHEET D-11-4001.
14. REINSTALL EXISTING FLUORIDE SATURATOR TANKS AND HANDRAIL.



NORTH

DEMOLITION PLAN

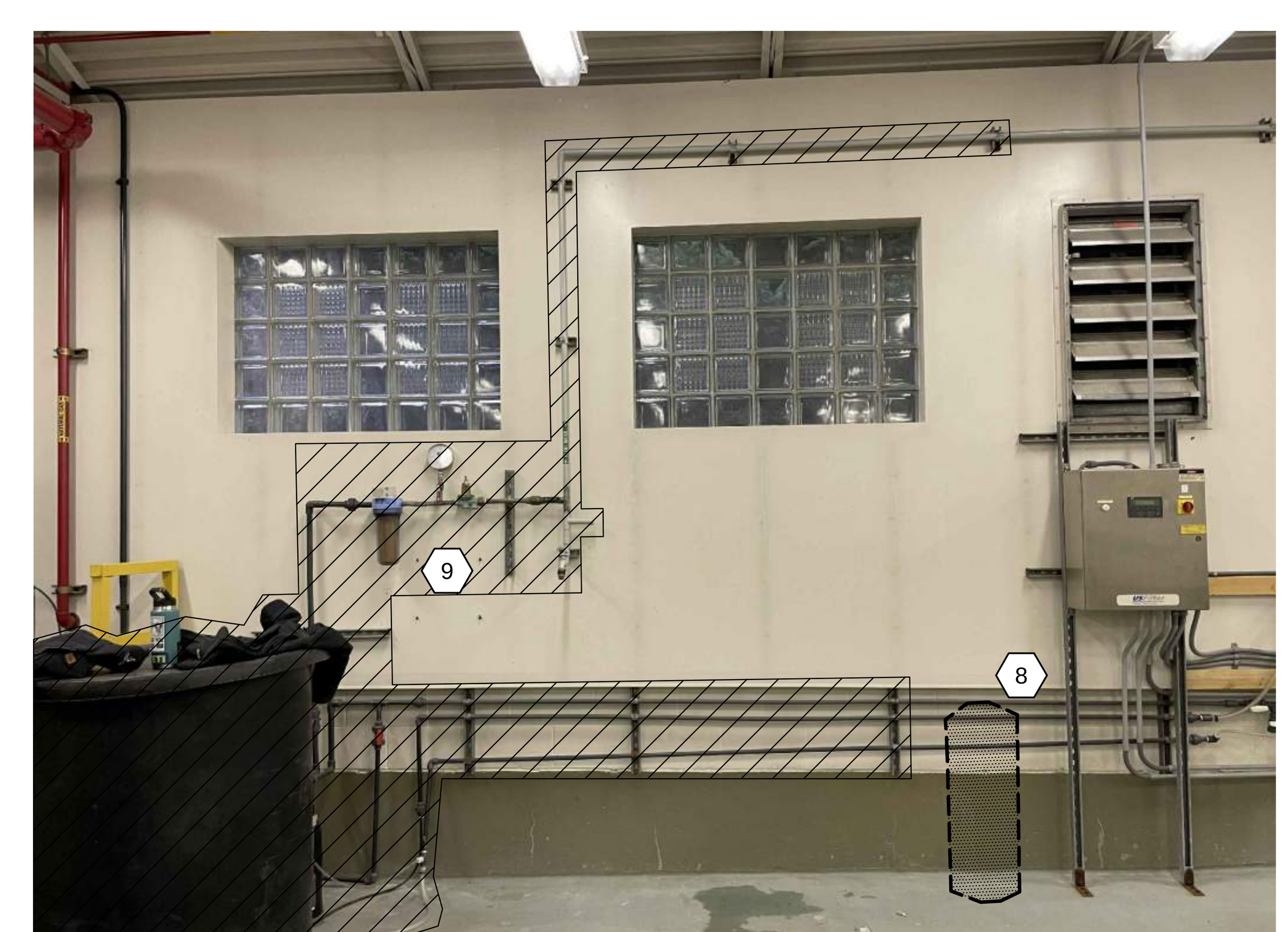
SCALE: NTS



CLOSE UP VIEW OF EXISTING SALT BRINE TANK AND WATER SOFTENERS

DEMOLITION PHOTO 1

SCALE: NTS



NORTH WALL ELEVATION VIEW

DEMOLITION PHOTO 2

SCALE: NTS

GENERAL NOTES:

1. DEMOLITION

TEMPORARILY REMOVE FOR CONSTRUCTION AND REPLACE

RELOCATE

TEMPORARY EQUIPMENT STAGING

APPROXIMATE EXTENT OF COATING WORK

KEY NOTES:

1. REMOVE FIBERGLASS GRATING, AS NEEDED, FOR TANK DEMOLITION AND INSTALLATION AND TO REPLACE CAUSTIC SODA PIPING. REINSTALL FIBERGLASS GRATING WHEN CONSTRUCTION IS COMPLETE.
2. REMOVE HAND RAILS, AS NEEDED, FOR TANK DEMOLITION AND INSTALLATION. REINSTALL HAND RAILS FOLLOWING INSTALLATION OF THE CAUSTIC SODA TANKS AND SALT BRINE SYSTEM.
3. DISASSEMBLE AND RELOCATE FLUORIDE SATURATOR TANKS PRIOR TO CAUSTIC SODA TANK DEMOLITION. REINSTALL FLUORIDE SATURATOR TANKS FOLLOWING INSTALLATION OF CAUSTIC SODA TANKS AND SALT BRINE SYSTEM.
4. RELOCATE FLUORIDE PUMP SKID AND CONTROL PANEL PRIOR TO INSTALLATION OF THE SALT BRINE SYSTEM. SEE SHEET D-11-1001 FOR NEW EQUIPMENT LOCATION.
5. RELOCATE WATER SOFTENERS PRIOR TO INSTALLATION OF THE SALT BRINE SYSTEM. SEE SHEET D-11-1001 DEMOLITION PHOTO 2 ON THIS SHEET FOR NEW EQUIPMENT LOCATION.
6. DEMOLISH PIPING POTABLE WATER, SOFTENED WATER, AND BRINE PIPING ON NORTH WALL PRIOR TO INSTALLATION OF THE SALT BRINE SYSTEM. SEE DEMOLITION PHOTO 2 ON THIS SHEET FOR LIMITS OF DEMOLITION.
7. AVAILABLE FOOTPRINT FOR TEMPORARY CHEMICAL TOTES TO BE USED FOR CAUSTIC SODA STORAGE AND FEED DURING DEMOLITION OF CAUSTIC SODA TANKS T1110 AND T1120.
8. REMOVE EXISTING WATER SOFTENERS AND RELOCATE TO AREA INDICATED IN THE NORTH WALL ELEVATION VIEW. SEE FOR NEW PIPING CONNECTIONS.
9. RELOCATE EXISTING FILTER-PRESSURE GAUGE-PRV-TAP ASSEMBLY AS INDICATED IN BRINE PIPING DETAIL ON SHEET D-12-4001.
10. APPROXIMATE AREA OF SECONDARY CONTAINMENT FLOORING THAT NEEDS PATCHING. PATCH FLOOR WITH NEW COATING PER SPEC 90 00 90 AND 90 90 06. CONTRACTOR TO ATTEND PREBID MEETING TO CONFIRM EXTENT AND METHODS PRIOR TO BID.

Brown AND Caldwell

90% DESIGN

Sammamish Plateau Water

Sammamish Plateau Water PFAS Project

REVISIONS

REV	DATE	DESCRIPTION

LINE IS 2 INCHES AT FULL SIZE

DESIGNED: D.ROTH

DRAWN: T.LEMON

CHECKED:

CHECKED:

APPROVED:

FILENAME
DD-11-1001.dwg

BC PROJECT NUMBER
155452

CLIENT PROJECT NUMBER

PROCESS

DEMOLITION PLAN FOR WELL 9 CHEMICAL ROOM

DRAWING NUMBER
DD-11-1001

SHEET NUMBER
OF

Path: C:\PW_WORKING\TLEMON\D0420877 FILENAME: DD-11-1001.DWG PLOT DATE: 12/17/2020 8:41:32 AM CAD USER: TOM LEMON
Facility Drawing 3 - Well 9 CC Demo.jpg
Well 9 North Wall.JPG
Well 9 Softener Close Up.jpg
SPW Logo_Square_RGB No TM (2).jpg
Wagner Archs.jpg

PLUMBING ABBREVIATIONS

INV ELEV	INVERT ELEVATION
RPBP	REDUCED PRESSURE BACKFLOW PREVENTER
A.F.F.	ABOVE FINISHED FLOOR
B.F.F.	BELOW FINISHED FLOOR
A.F.G.	ABOVE FINISHED GRADE
⬡	REFER TO NOTE NO.
WC-1, ETC.	FIXTURE IDENTIFICATION (SEE SPEC'S.)
VTR	VENT THRU ROOF

PLUMBING SYMBOLS

SYMBOL	DESCRIPTION	ABBV.
	PIPE SLEEVE	
	FIRE MAIN	F
	EXISTING TO BE REMOVED	
	EXISTING TO REMAIN	
CO	CLEANOUT (ABOVE GROUND PIPING)	CO
CO	CLEANOUT (BURIED PIPING)	CO
WCO	CLEANOUT (IN WALL)	WCO
	PIPE TURNED UP/DOWN	
	GATE VALVE	
	CHECK VALVE	
	BUTTERFLY VALVE	
	BALL VALVE	
	GAS COCK	
	GLOBE VALVE	
	A.S.M.E. RATED T&P RELIEF VALVE	
	3-WAY MODULATING VALVE	
	ROOF DRAIN	RD
	HUB DRAIN	HD
	FLOOR DRAIN	FD
	PIPE ANCHOR	
	SHOCK ARRESTOR	SA
	FLEXIBLE CONNECTOR	
	THERMOMETER	
	PRESSURE GAUGE & GAUGE COCK	
EXT.C.O.	EXTERIOR CLEANOUT	
	DIRECTION OF FLOW	
	FLEXIBLE CONNECTOR	
	UNION IN LINE	
	CAP OR PLUG	
	TEE	
	ELBOW	
	FLOW	
	REMOVE PIPE AND CAP EXISTING TO REMAIN	
	CONNECTION POINT, NEW TO EXISTING	
	PRESSURE / TEMPERATURE PORT	

PLUMBING GENERAL NOTES

1. THE PLUMBING DRAWINGS ARE DIAGRAMMATIC AND SHOW THE RELATIONSHIP BETWEEN FIXTURES AND CONNECTIONS. DO NOT SCALE THE DRAWINGS. FOR EXACT LOCATIONS VERIFY LOCATIONS WITH ARCHITECTURAL DRAWINGS.
2. COORDINATE PLUMBING WORK WITH THE WORK OF OTHER TRADES AND NOTIFY OTHERS OF ANY CHANGES OF ANY CHASE OR ACCESS REQUIREMENTS FOR HIS PORTION OF THE WORK.
3. INSTALL PLUMBING IN ACCORDANCE WITH NATIONAL, STATE AND LOCAL CODES. CONTRACTOR TO PAY FOR PERMITS, FEES, INSPECTIONS AND CONNECTIONS AS MAY BE REQUIRED FOR THIS WORK.
4. VENT PIPING TO PENETRATE AND EXTEND A MINIMUM OF 12" ABOVE TOP OF ROOF UNLESS NOTED OTHERWISE. FLASH AND SEAL WEATHERTIGHT TO ROOF.
5. WASTE PIPING 2 1/2" AND SMALLER TO SLOPE A MINIMUM OF 1/4" PER FOOT, 3" AND LARGER TO SLOPE A MINIMUM OF 1/8" PER FOOT.
6. ROUTE PIPING IN ORDERLY MANNER AND MAINTAIN SLOPE GRADIENT.
7. INSTALL PIPING TO CONSERVE BUILDING SPACE AND NOT TO INTERFERE WITH USE OF SPACE.
8. GROUP PIPING WHENEVER PRACTICAL AT COMMON ELEVATIONS.
9. INSTALL PIPING TO ALLOW FOR EXPANSION AND CONTRACTION WITHOUT STRESSING PIPE, JOINTS OR CONNECTED EQUIPMENT.
10. PROVIDE CLEARANCE FOR INSTALLATION OF INSULATION AND ACCESS TO VALVES AND FITTINGS.
11. PROVIDE ACCESS WHERE VALVES AND FITTINGS ARE NOT EXPOSED.
12. INSTALL VALVES WITH STEMS UPRIGHT OR HORIZONTAL, NOT INVERTED.
13. INSTALL BALL VALVES FOR SHUT-OFF AND TO ISOLATE EQUIPMENT, PARTS OF SYSTEM, OR VERTICAL RISERS. HANDLE SHALL POINT IN THE DIRECTION OF FLOW. INSTALL MANUAL AIR VENTS WITH CAPS AT HIGH POINTS OF POTABLE WATER LINES.
14. INSTALL GLOBE VALVES FOR THROTTLING, BYPASS OR MANUAL FLOW CONTROL SERVICES.
15. PROVIDE NEW WATER SERVICE COMPLETE WITH REDUCED PRESSURE BACKFLOW PREVENTERS AND PRESSURE REDUCING VALVE WITH STRAINER AND BY-PASS.
16. STORM, SANITARY WASTE AND VENT PIPING INSIDE BUILDING BELOW FLOOR TO BE SERVICE WEIGHT CAST IRON HUB AND SPIGOT PIPE AND FITTINGS CONFORMING TO CISPI 301 AND ASTM A-74, WITH PUSH-ON NEOPRENE GLAND JOINTS. EMBED UNDERGROUND PIPE IN 6" OF SAND ALL AROUND PIPE.
17. STORM, SANITARY WASTE AND VENT PIPING ABOVE THE SLAB TO BE SERVICE WEIGHT NO-HUB CAST IRON PIPE AND FITTINGS CONFORMING TO CISPI 301, AND ASTM A-888. JOIN NO-HUB PIPE WITH STAINLESS STEEL CLAMP IN SHIELD ASSEMBLY JOINT CONFORMING TO CISPI 310 AND ASTM C-554. EXCEPTION TO THIS IS THE A SECONDARY STORM DRAINS THAT ARE NOT LOCATED IN AREAS THAT HAVE RETURN AIR PLENUMS. TO REDUCE LOAD ON ROOF STRUCTURES THE 12" SECONDARY DRAINS IN THE SYSTEM ASSEMBLY AREA BETWEEN COLUMN 2 AND 6.2 ARE TO BE PVC WITH HUB AND SPIGOT FITTINGS WITH PUSH-ON NEOPRENE GLAND JOINTS.
18. HOT AND COLD WATER PIPING ABOVE GRADE TO BE ASTM B88 TYPE L HARD DRAWN COPPER TUBING WITH ASME B16.18 CAST BRONZE OR ASME B16.33 WROUGHT COPPER AND BRONZE FITTINGS AND ASTM B32 LEAD-FREE SOLDER, GRADE 95TA JOINTS.
19. HOT AND COLD WATER PIPING BELOW GRADE TO BE ASTM B88 TYPE K SOFT DRAWN COPPER TUBING WITH ASME B16.18 CAST BRONZE OR ASME B16.22 WROUGHT COPPER AND BRONZE FITTINGS AND ASTM B32 SOLDER, GRADE 95TA JOINTS WITH NEW JOINTS BELOW SLAB.
20. HOT AND COLD WATER PIPING ABOVE GRADE, EXCEPT WHERE NOTED OTHERWISE, TO BE INSULATED WITH 1 1/2" FIBERGLASS PIPE INSULATION WITH ALL SERVICE JACKET, CAULK WALL AND FLOOR PENETRATIONS. INSULATION MUST HAVE A K-FACTOR OF .24.
21. ADJUST STOPS AND VALVES FOR INTENDED WATER FLOW RATE TO FIXTURES WITHOUT SPLASHING, NOISE OR OVERFLOW.
22. EXTEND CLEANOUTS TO FINISHED FLOOR OR WALL SURFACE. LUBRICATE THREADED CLEANOUT PLUG WITH MIXTURE OF GRAPHITE AND LINSEED OIL. ENSURE CLEARANCE OF CLEANOUT FOR RODDING OF DRAINAGE SYSTEM. IN CASE EXTERIOR CLEANOUTS AND CONCRETE FLUSH WITH GREAT.
23. INSTALL APPROVED POTABLE WATER PROTECTION DEVICE ON PLUMBING LINES WHERE CONTAMINATION OF DOMESTIC WATER MAY OCCUR.
24. INSTALL WATER HAMMER ARRESTORS COMPLETE WITH ACCESSIBLE ISOLATED VALVE ON HOT AND COLD WATER SUPPLY PIPING. INSTALL THEM AT LOCATIONS THAT REQUIRES THEM TO PREVENT WATER HAMMER. CONTRACTOR IS TO INSTALL WATER HAMMER ARRESTORS PER STANDARD PLUMBING PRACTICE AS NEEDED EVEN IF THEY ARE NOT SHOWN ON THE DRAWINGS. AS A MINIMUM ARRESTORS ARE TO BE INSTALLED AT ANY FAST CLOSING VALVE, AND AT FLUSH VALVES IN TOILETS GROUPS. WATER HAMMER ARRESTORS ARE TO BE SIZED AND SELECTED IN ACCORDANCE WITH UNIVERSAL STANDARD P.D.I. - WH201.
25. INSTALL WATER HEATER IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS. COORDINATE WITH PLUMBING AND RELATED ELECTRICAL WORK TO ACHIEVE OPERATING SYSTEM.
26. HANGERS FOR PIPE SIZES 1/2" TO 1 1/2" TO BE CARBON STEEL, ADJUSTABLE SWIVEL, SPLIT RING.
27. WALL SUPPORT FOR PIPE SIZES TO 3" TO BE CAST-IRON HOOK.
28. COPPER PIPE SUPPORT TO BE CARBON STEEL RING, ADJUSTABLE, COPPER PLATED.
29. ROOF VENT PENETRATION FLASHING FOR WATERPROOFING ARE TO BE MANUFACTURED ALUMINUM FLASHING PRODUCTS WITH WATERPROOF RUBBER SEALS MADE FOR VENT LINE SIZE.
30. INSTALL HANGERS TO PROVIDE MINIMUM 1/2" SPACE BETWEEN FINISH COVERING AND ADJACENT WORK, USE HANGERS WITH 1 1/2" MINIMUM VERTICAL ADJUSTMENT.
31. PLACE A HANGER WITHIN 12" OF EACH HORIZONTAL ELBOW AND SUPPORTED RISER PIPING INDEPENDENTLY OF CONNECTED HORIZONTAL PIPING.
32. PRIME COAT EXPOSED STEEL HANGERS AND SUPPORTS.
33. PROVIDE SLEEVES FOR PIPES THROUGH NEW CONCRETE FLOORS AND MASONRY WALLS AND FIREPROOF CAULK SLEEVES IN ACCORDANCE WITH NFPA REQUIREMENTS. FOR PIPES THROUGH EXISTING CONCRETE FLOORS AND MASONRY WALLS, CORE NEW HOLE AND PROVIDE FIREPROOF CAULK IN ANNULAR SPACE BETWEEN PIPE AND CORE.
34. SIZE SLEEVES/CORES LARGE ENOUGH TO ALLOW FOR MOVEMENT DUE TO EXPANSION AND CONTRACTION. PROVIDE FOR CONTINUOUS INSULATION WRAPPING OF GLASS FIBER TYPE, NON-COMBUSTIBLE. PROVIDE FLEXIBLE FLASHING AND METAL COUNTER FLASHING WHERE PIPING PENETRATES WEATHER/WATERPROOFED WALLS, FLOORS AND ROOFS.
35. WHERE PIPING PENETRATES FLOOR, CEILING OR WALL, CLOSE OFF SPACE BETWEEN PIPE AND ADJACENT WORK WITH STUFFING INSULATION AND CAULK SEAL. PROVIDE CLOSE FITTING METAL COLLAR OR ESCUTCHEON COVERS AT BOTH SIDES OF PENETRATION.
36. CONTRACTOR TO VERIFY EXISTING CONDITIONS BEFORE STARTING WORK, THAT WALL AND FLOOR FINISHES ARE PREPARED AND READY FOR INSULATION OF FIXTURES, THAT ELECTRICAL POWER IS AVAILABLE AND OF THE CORRECT CHARACTERISTICS AND THAT THE MILLWORK IS CONSTRUCTED WITH ADEQUATE PROVISIONS FOR THE INSTALLATION OF COUNTERTOP LAVATORIES IN SINKS.
37. CONTRACTOR TO ROUGH-IN FIXTURE PIPING CONNECTIONS IN ACCORDANCE WITH MINIMUM SIZE INDICATED AND PLUMBING FIXTURE SCHEDULE FOR PARTICULAR FIXTURES.
38. INSTALL EACH FIXTURE "P" TRAP SUCH THAT IT IS EASILY REMOVABLE FOR SERVICING AND CLEANING.
39. INSTALL CHROME PLATED RIGID OR FLEXIBLE SUPPLIES TO FIXTURES WITH LOOSE KEY STOPS, REDUCERS AND ESCUTCHEONS.
40. INSTALL COMPONENTS LEVEL AND PLUMB.
41. SEAL FIXTURES TO COUNTERTOP, WALL AND FLOOR SURFACE WITH SEALANT IN ACCORDANCE WITH SEALANT MANUFACTURE'S REQUIREMENTS FOR PREPARATION OF SURFACE AND MATERIAL INSULATION INSTRUCTIONS, COLOR TO MATCH FIXTURE.
42. BALL VALVES FOR DOMESTIC WATER SERVICE TO BE FULL PORT, BRONZE, 2 PIECE BODY.
43. SEE SPECIFICATION SECTIONS 01010 AND 01040 FOR COORDINATION REQUIREMENTS BETWEEN CONSTRUCTION CONTRACTS.
44. SEE SPECIFICATION SECTIONS 01010 AND 01040 FOR CUTTING, PATCHING, AND RESTORATION REQUIREMENTS.
45. SEE SPECIFICATION SECTIONS 01010 FOR REQUIREMENTS REGARDING MATERIALS AND EQUIPMENT FURNISHED BY THE GENERAL, HVAC, OR PLUMBING CONTRACTOR BUT INSTALLED AND/OR CONNECTED BY THE ELECTRICAL CONTRACTOR.

PLUMBING FIXTURE SCHEDULE

ID	FIXTURE TYPE	LOCAL CONNECTION				NOTES
		CW SIZE	HW SIZE	D SIZE	V SIZE	
LAV	LAVATORY	1/2"	1/2"	2	1 1/2"	
WC	WATER CLOSET	1"	-	4"	2"	
HB	HOSE BIBB	3/4"	-	-	-	
FD-1	FLOOR DRAIN	-	-	SEE DWG	-	UNFINISHED FLOOR
FD-2	FLOOR DRAIN	-	-	SEE DWG	-	FINISHED FLOOR
FCO	FLOOR CLEANOUT	-	-	SEE DWG	-	UNFINISHED FLOOR
WCO	WALL CLEANOUT	-	-	SEE DWG	-	
V	TRAP PRIMER ASSEMBLY	1/2"	-	-	-	

BACKFLOW PREVENTER SCHEDULE

ID	BASIS OF DESIGN MANUF & MODEL	LOCATION	SIZE	DESCRIPTION
BP2160	WATTS 009	GAC	1 1/2"	REDUCED PRESSURE ZONE BACKFLOW PREVENTER, HORIZONTAL CONFIGURATION, PROVIDE WITH BALL VALVES, BRONZE STRAINER, AIR GAP FITTING.
BP2161	WATTS 009	GAC	3/4"	REDUCED PRESSURE ZONE BACKFLOW PREVENTER, HORIZONTAL CONFIGURATION, PROVIDE WITH BALL VALVES, BRONZE STRAINER, AIR GAP FITTING.

WATER HEATER SCHEDULE

ID	BASIS OF DESIGN MANUF & MODEL	LOCATION	TYPE	ACTIVATION FLOW GPM	TEMP. RISE @			ELECTRICAL			NOTES
					0.35 GPM	0.50 GPM	1.0 GPM	KW	VOLTS / PHASE	FLA	
H2160	CHRONOMITE CM-12L/120	GAC	INLINE WATER HEATER	0.2	28	20	NA	1.44	120/1	12	

GRINDER PUMP SCHEDULE

ID	BASIS OF DESIGN MANUF & MODEL	LOCATION	TYPE	FLUID	FLOW RATE (GPM)	FLUID TEMPERATURE (°F)	TOTAL DEVELOPED HEAD (FT)	MAX SPHERE DIAMETER (INCH)	PIPE CONNECTIONS		ELECTRICAL					PHYSICAL	NOTES
									SUCTION SIZE (NOM INCH)	DISCHARGE SIZE (NOM INCH)	MOTOR SIZE (HP)	MOTOR SPEED (RPM)	VOLT/PH	FLA	VFD (Y, N)	WEIGHT (LBS)	
P2100	PENTAIR HPGX	GAC	SUBMERSIBLE	DOMESTIC SEWAGE	50	120	60	1/2"	NA	1 1/4"	2	3450	460/3		N	110	1

NOTES:
1. PUMP SHALL BE SUITABLE FOR CLASS 1, DIVISION1, GROUP D ENVIRONMENT.

Brown AND Caldwell

90% DESIGN

Sammamish Plateau Water

Sammamish Plateau Water PFAS Project

REVISIONS

REV	DATE	DESCRIPTION

LINE IS 2 INCHES AT FULL SIZE

DESIGNED: K.RICE
DRAWN: K.RICE
CHECKED: D.STEWART
CHECKED:
APPROVED: T.GATLIN

FILE NAME

BC PROJECT NUMBER 155452

CLIENT PROJECT NUMBER XX

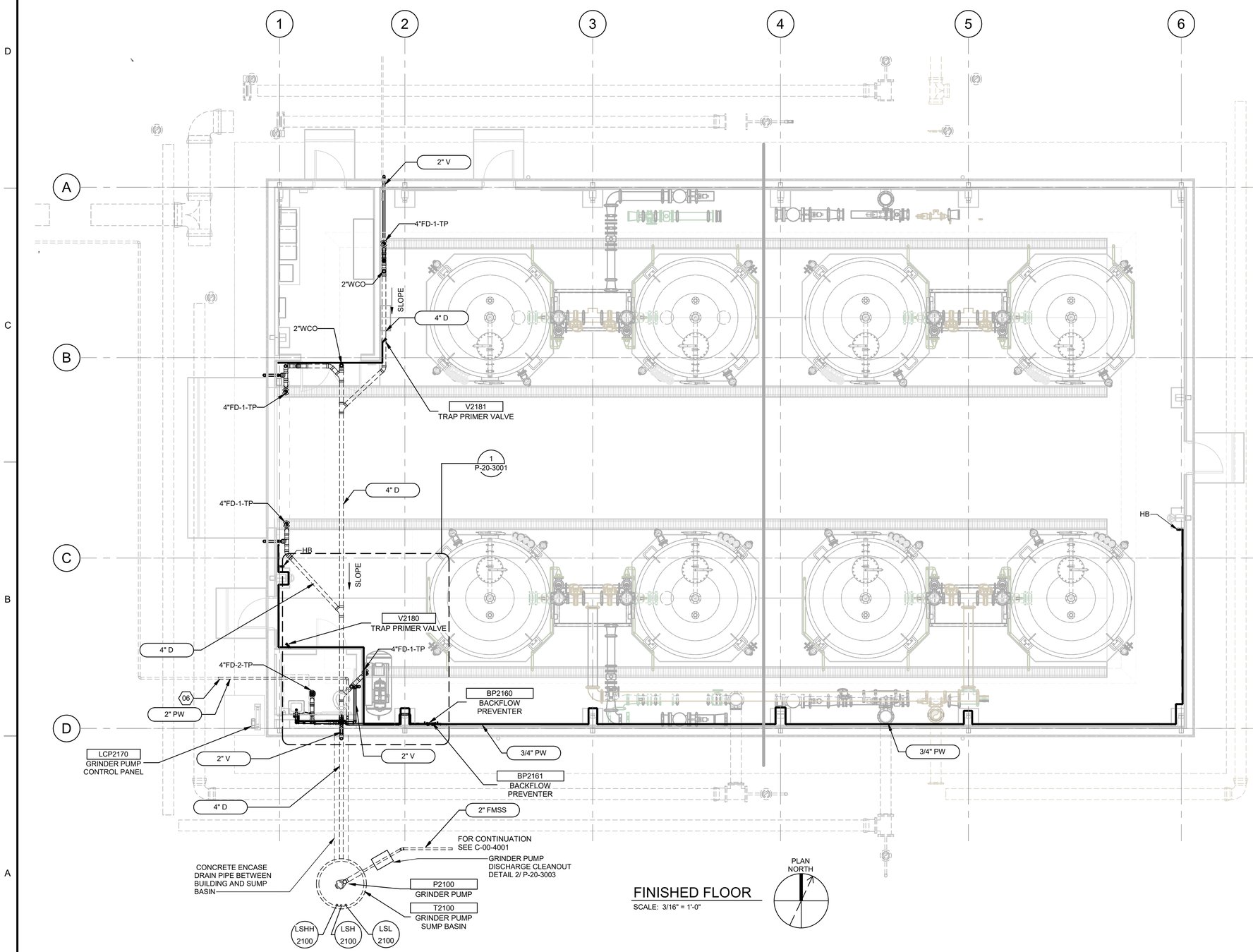
PLUMBING

PLUMBING LEGEND AND GENERAL NOTES

DRAWING NUMBER P-20-0001

SHEET NUMBER OF

Plot Date: 12/15/2020 6:00:12 PM Path: BIM 360://155452 - Sammamish Plateau PFAS Design/155452-M-20V19.rvt



FINISHED FLOOR

SCALE: 3/16" = 1'-0"

GENERAL NOTES:

KEYNOTES:

1. FOR CONTINUATION, SEE C-00-4001.

Brown AND Caldwell

90% DESIGN

Sammamish Plateau Water

Sammamish Plateau Water PFAS Project

REVISIONS

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CHECKED:
APPROVED: T.GATLIN

FILE NAME

BC PROJECT NUMBER
155452

CLIENT PROJECT NUMBER
XX

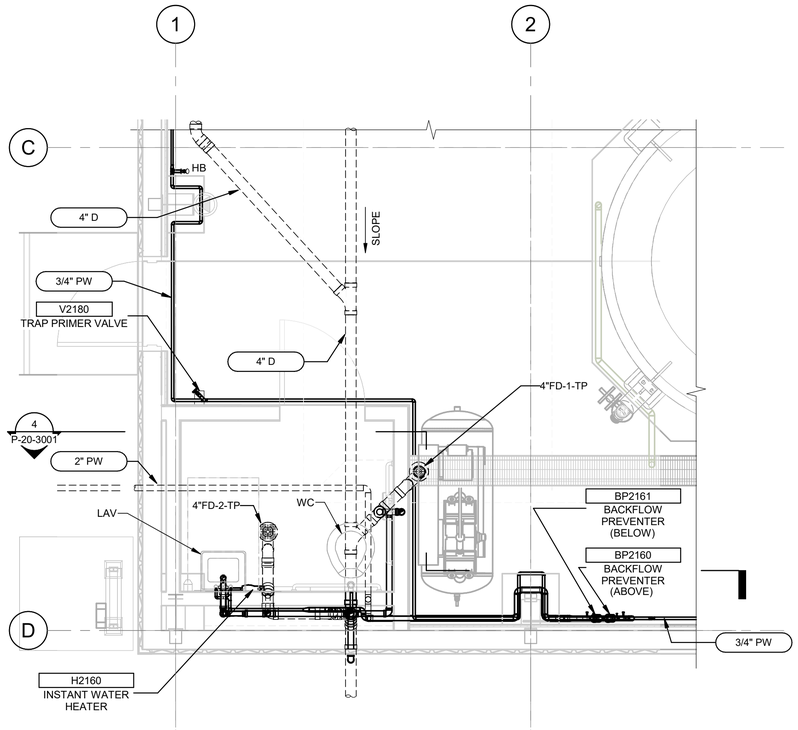
PLUMBING

GAC BUILDING PLUMBING FLOOR PLAN

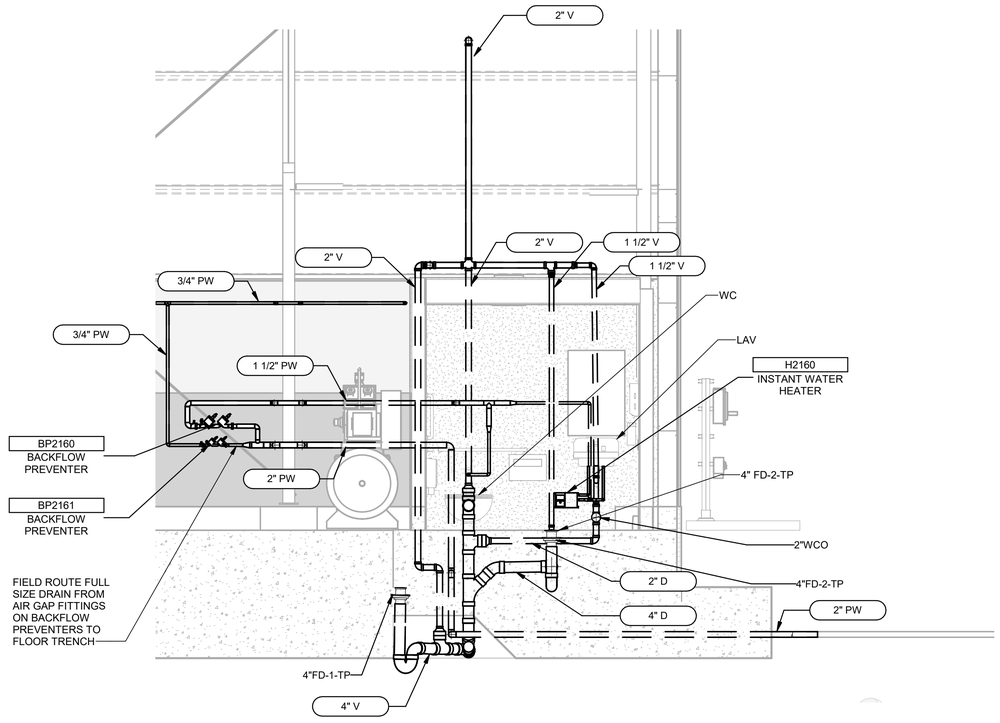
DRAWING NUMBER
P-20-1001

SHEET NUMBER
OF

Plot Date: 12/16/2020 3:06:08 PM Path: BIM 360://155452 - Sammamish Plateau PFAS Design/155452-M-20V19.rvt



1 M-20-3001 RESTROOM
SCALE: 3/8" = 1'-0"



3 P-20-3001 SECTION
SCALE: 3/8" = 1'-0"

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Sammamish Plateau Water

Sammamish
Plateau Water
PFAS Project

REVISIONS

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AT FULL SIZE

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CHECKED: D.STEWART
CHECKED:
APPROVED: T.GATLIN

FILE NAME

BC PROJECT NUMBER
155452

CLIENT PROJECT NUMBER
XX

PLUMBING

GAC PLUMBING PARTIAL PLANS AND SECTIONS

DRAWING NUMBER
P-20-3001

SHEET NUMBER
OF

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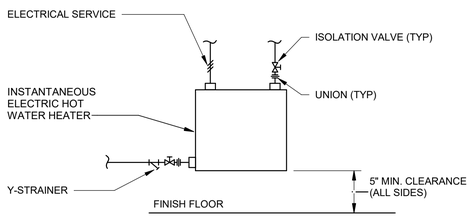
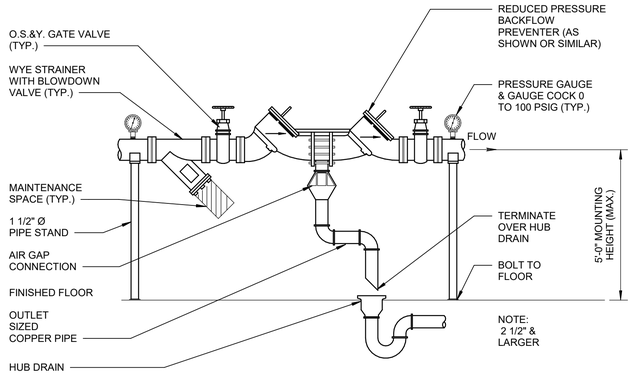
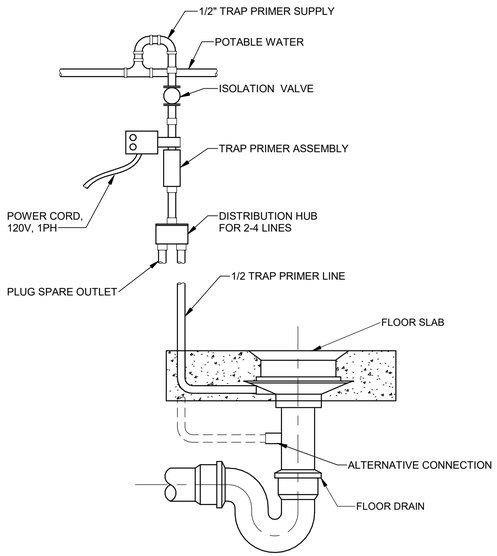


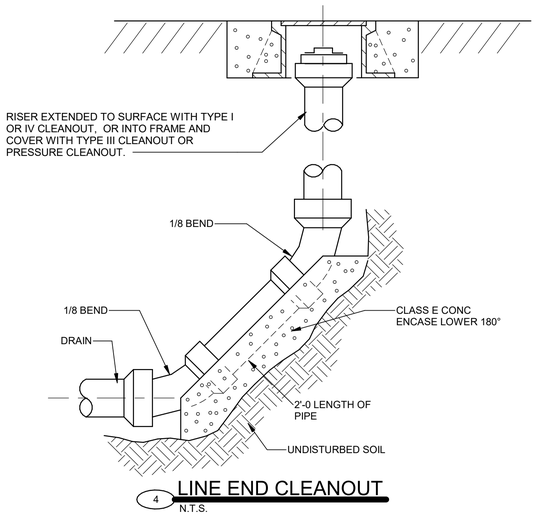
1 INSTANTANEOUS ELEC WTR HEATER
N.T.S.



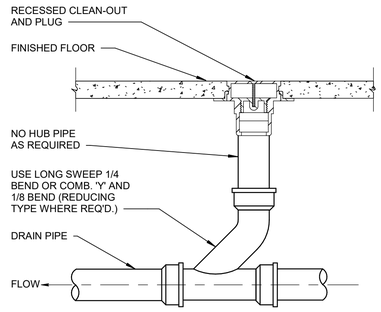
2 REDUCED PRESSURE BACKFLOW PREVENTER
N.T.S.



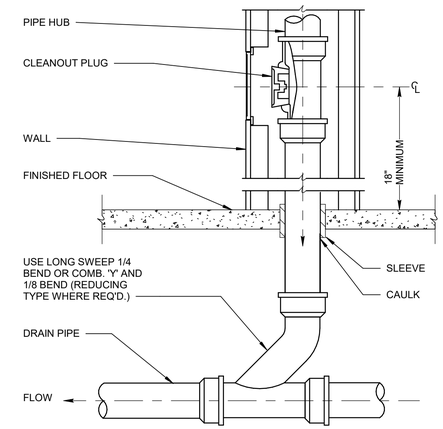
3 TRAP PRIMER
N.T.S.



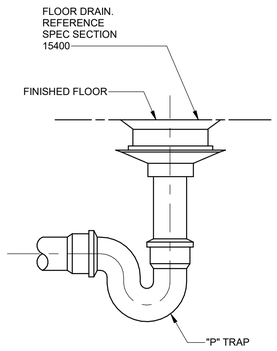
4 LINE END CLEANOUT
N.T.S.



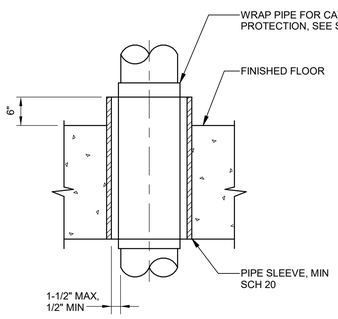
5 FLOOR CLEANOUT
N.T.S.



6 WALL CLEANOUT
N.T.S.

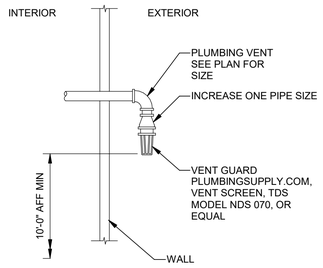


7 FLOOR DRAIN
N.T.S.



FOR FLOORS

8 TYPE A PIPE PENETRATION
N.T.S.



9 PLUMBING VENT TERMINATION
N.T.S.

Brown AND Caldwell

90% DESIGN

Sammamish Plateau Water

Sammamish
Plateau Water
PFAS Project

REVISIONS

REV	DATE	DESCRIPTION

LINE IS 2 INCHES
AT FULL SIZE

DESIGNED: K.RICE
DRAWN: K.RICE
CHECKED: D.STEWART
CHECKED:
APPROVED: T.GATLIN

FILE NAME

BC PROJECT NUMBER
155452

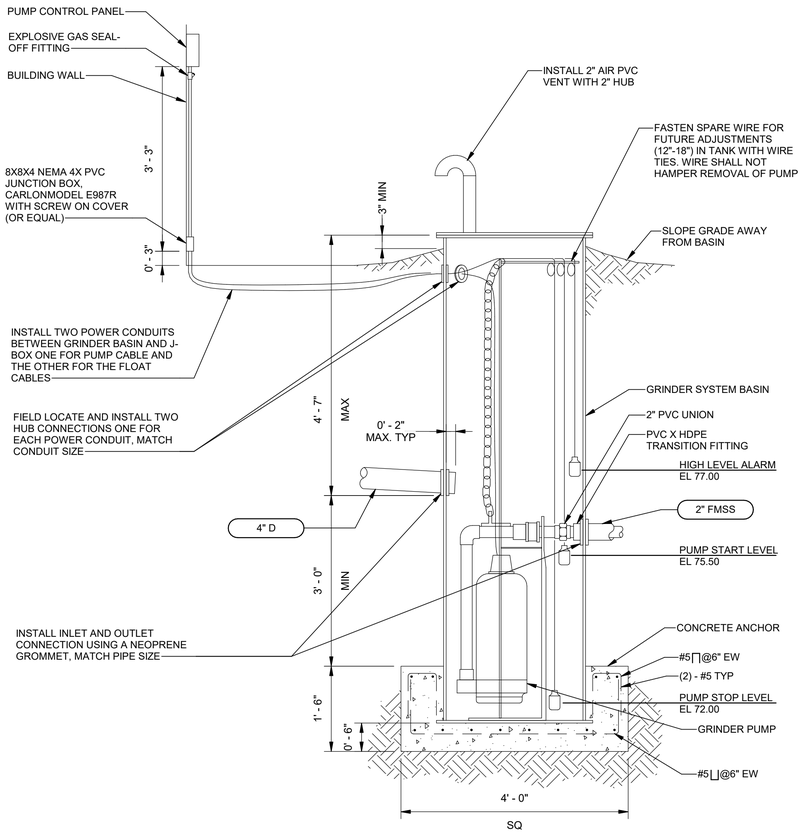
CLIENT PROJECT NUMBER
XX

PLUMBING

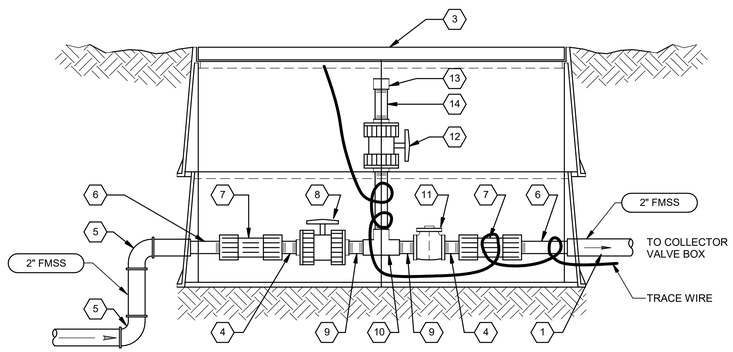
PLUMBING DETAILS

DRAWING NUMBER
P-20-3002

SHEET NUMBER
OF



2 GRINDER PUMP SYSTEM DETAIL
N.T.S.



1 GRINDER PUMP DISCHARGE CLEANOUT
N.T.S.

MATERIAL LIST FOR GRINDER PUMP CLEANOUT DETAIL	
1	2" FMSS
2	TWO STACKED CARSON JUMBO BOX (PART #1730)
3	CARSON LID (PART #1730) MARKED "SEWER"
4	2" MALE THREADED NIPPLE SCH. 80 PVC (LENGTH TO SUIT)
5	2" FMSS, 90 DEG BEND
6	2" HDPE X PVC TRANSISTION COUPLING
7	2" COMPRESSION COUPLING SCH. 80 PVC
8	2" UNION BALL VALVE THREADED SCH. 80 PVC
9	2" X 3" NIPPLE THREADED SCH. 80 PVC
10	2" X 1" TEE THREADED SCH. 80 PVC
11	2" BRASS SWING CHECK VALVE
12	1" UNION BALL VALVE THREADED SCH. 80 PVC
13	1" CAP THREADED SCH. 80 PVC
14	1" MALE THREADED NIPPLE SCH. 80 PVC (LENGTH TO SUIT)

Brown AND Caldwell

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Sammamish Plateau Water

Sammamish Plateau Water PFAS Project

REVISIONS

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CHECKED: D.STEWART
CHECKED:
APPROVED: T.GATLIN

FILE NAME

BC PROJECT NUMBER
155452

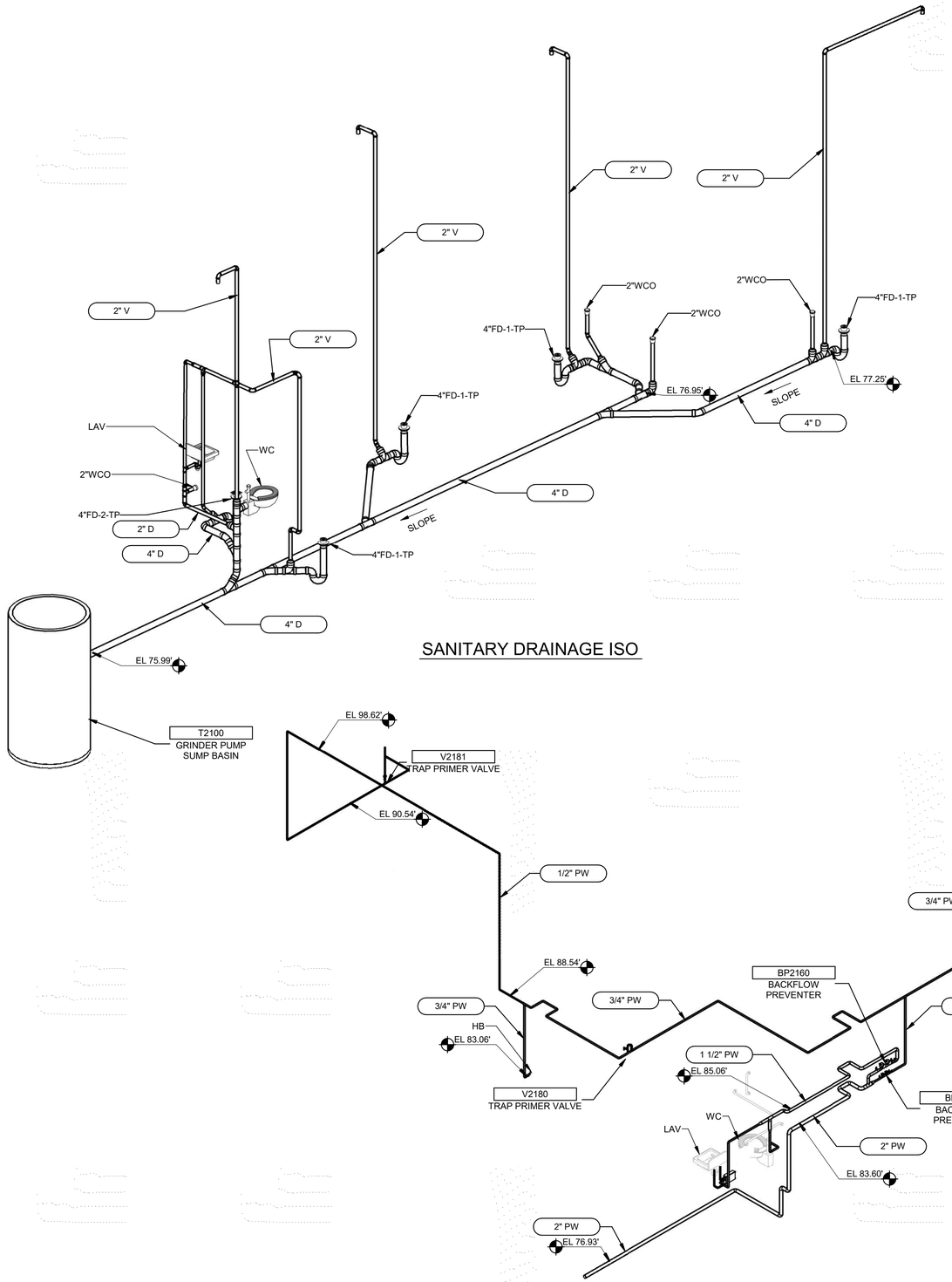
CLIENT PROJECT NUMBER
XX

PLUMBING DETAILS 2

DRAWING NUMBER
P-20-3003

SHEET NUMBER
OF

Plot Date: 12/16/2020 3:06:14 PM Path: BIM 360://155452 - Sammamish Plateau PFAS Design/155452-M-20V19.rvt



SANITARY DRAINAGE ISO

DOMESTIC WATER ISO

GENERAL NOTES:

KEYNOTES:

Brown AND Caldwell

90% DESIGN

Sammamish Plateau Water

Sammamish Plateau Water PFAS Project

REVISIONS

REV	DATE	DESCRIPTION

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DRAWN: K.RICE
CHECKED: D.STEWART
CHECKED:
APPROVED: T.GATLIN
FILE NAME
BC PROJECT NUMBER 155452
CLIENT PROJECT NUMBER XX

PLUMBING

PLUMBING DIAGRAMS

DRAWING NUMBER P-20-5001

SHEET NUMBER OF

Plot Date: 12/15/2020 6:00:58 PM Path: BIM 360://155452 - Sammamish Plateau PFAS Design/155452-M-20V19.rvt

STANDARD HVAC DESIGNATIONS

VD — DAMPER, MANUAL VOLUME

ERV- — FAN, EXHAUST ROOF VENT

DUCT, FLEXIBLE

DUCT SECTION, EXHAUST AIR

DUCT SECTION, RETURN AIR

DUCT SECTION, SUPPLY AIR DOWN

DUCT SECTION, STANDARD BRANCH FOR SUPPLY AND RETURN

AIR DISTRIBUTION, TURNING VANE IN DUCTWORK

REGISTER GRILLE, CEILING SUPPLY

CD — DIFFUSER, CEILING, THREE-WAY, RECTANGLE OR SQUARE

CD — DIFFUSER, CEILING, TWO-WAY, RECTANGLE OR SQUARE

12x4 — AIR DUCT, FIRST DIMENSION DUCT SIDE SHOWN, SECOND DIMENSION NOT SHOWN, (FOR ACOUSTICAL LINING OR INTERNAL INSULATION, SEE SPECIFICATIONS)

TURNING VANES IN DUCT

FLOW SCHEMATIC SYMBOLS

CENTRIFUGAL FAN

PROPELLER FAN

AIR FLOW — BACKDRAFT DAMPER

PARTICULATE FILTER

CHEMICAL FILTER

AIR FLOW — PARALLEL BLADE DAMPER

AIR FLOW — OPPOSED BLADE DAMPER

M, AIR FLOW — MOTORIZED DAMPER

LOUVER

ROOF EXHAUST FAN, PROPELLER OR CENTRIFUGAL TYPE

HC — HOT WATER HEATING COIL

X, C — DIRECT EXPANSION COIL

H, C — ELECTRIC UNIT HEATER

IN-LINE FAN

GENERAL NOTES

1. GENERAL HVAC NOTES APPLY TO ALL HVAC DRAWINGS.
2. ALL SHEET METAL FLASHING REFERENCED IN DETAILS SHALL BE ALUMINUM.
3. CONTRACTOR SHALL BE AWARE THAT SOME HVAC EQUIPMENT MAY NEED TO BE INSTALLED BEFORE BUILDING ROOFS ARE PLACED.
4. CONTRACTOR SHALL SCHEDULE SUBMITTALS AND CONSTRUCTION ACCORDINGLY. THIS DRAWING IS GENERAL IN NATURE. SOME DESIGNATIONS AND SYMBOLS MAY NOT BE USED ON THE CONTRACT DRAWINGS.
5. INSTALL HEATING, VENTILATING AND AIR CONDITIONING EQUIPMENT AND DUCTWORK TO AVOID INTERFERENCES WITH STRUCTURE, PIPING, EQUIPMENT, CONDUIT, LIGHTING, ETC. DUCTWORK AND ASSOCIATED ACCESSORIES MAY REQUIRE REROUTING TO FACILITATE THE PIPING, LIGHTING, AND EQUIPMENT INSTALLATION. CONTRACTOR SHALL SUBMIT THE PLAN AND DETAIL FOR REVIEW AND APPROVAL PRIOR TO FABRICATION.
6. OVERALL PHYSICAL SIZE OF THE EQUIPMENT SELECTED BY THE CONTRACTOR SHALL NOT EXCEED THE SIZE SHOWN ON THE DRAWINGS. CLEARANCES, DIMENSIONS OR SCALED DISTANCES SHOWN ON THE DRAWINGS SHALL BE MAINTAINED. ALL PROPOSED CHANGES AND ADDITIONS SHALL BE SUBMITTED FOR CONSTRUCTION MANAGER'S REVIEW AND SHALL BE DONE ONLY IF APPROVED BY THE CONSTRUCTION MANAGER AND AT NO ADDITIONAL COST TO THE OWNER. THE CONTRACTOR SHALL BEAR ALL COSTS OF ASSOCIATED CHANGES AND ADDITIONS.
7. DUCT CONNECTIONS TO EQUIPMENT, AND EQUIPMENT SUPPORTS SHALL BE VERIFIED AND ADJUSTED TO MATCH ACTUAL EQUIPMENT FURNISHED AT NO ADDITIONAL COST TO THE OWNER.
8. NOT ALL THE FITTINGS ARE SHOWN ON THE DRAWINGS. THE CONTRACTOR SHALL PROVIDE THE FITTINGS SHOWN ON THE DRAWINGS AND ADDITIONAL FITTINGS AS REQUIRED FOR THE DUCTWORK ARRANGEMENT SHOWN ON THE DRAWINGS AND FOR EQUIPMENT FURNISHED.
9. NOT ALL THE ITEMS ARE SHOWN IN PLANS, SECTIONS DETAILS, SCHEMATICS, AND P&ID DRAWINGS. THE CONTRACTOR SHALL PROVIDE ALL ITEMS EVEN IF THEY ARE SHOWN AT ONLY ONE LOCATION ON THE DRAWINGS. IN ADDITION, THE CONTRACTOR SHALL PROVIDE ALL ITEMS REQUIRED PER SPECIFICATION WHETHER OR NOT THEY ARE SHOWN ON THE DRAWINGS.
10. NOT ALL HANGERS, BRACKETS, SUPPORTS OR BRACES FOR DUCTWORK ARE INDICATED ON THE DRAWINGS. REFER TO THE SPECIFICATIONS FOR SUPPORT REQUIREMENTS IN ADDITION TO THOSE SHOWN ON THE DRAWINGS.
11. IN CASE OF CONFLICT BETWEEN THE DRAWINGS, THE MOST STRINGENT REQUIREMENTS SHALL GOVERN UNLESS SPECIFICALLY APPROVED OTHERWISE BY THE ENGINEER.
12. DUCT SIZES INDICATED ARE CLEAR DIMENSIONS INSIDE THE DUCT OR THE DUCT LINING.
13. AIRTIGHT ACCESS DOORS OF NOT LESS THAN 12" X 12" SIZE SHALL BE PROVIDED TO ALLOW INSPECTION OF ALL DAMPERS AND FILTERS.
14. THE LOCATION OF PIPING TO THE AIR HANDLING UNITS SHALL NOT INTERFERE WITH FILTER REMOVAL OR SERVICING THE EQUIPMENT.
15. ROOF FANS, VENTS AND HOODS SHALL BE PROVIDED WITH ½" MESH STAINLESS STEEL BIRD SCREEN OVER ALL OPENINGS.
16. ALL STAINLESS STEEL SHALL BE TYPE 316 OR 316L UNLESS SPECIFICALLY NOTED.

Brown AND Caldwell

90% DESIGN

Sammamish Plateau Water

Sammamish Plateau Water PFAS Project

REVISIONS

REV	DATE	DESCRIPTION

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DESIGNED: K.RICE
DRAWN: K.RICE
CHECKED: D.STEWART
CHECKED:
APPROVED: T.GATLIN
FILE NAME
BC PROJECT NUMBER 155452
CLIENT PROJECT NUMBER XX
HVAC

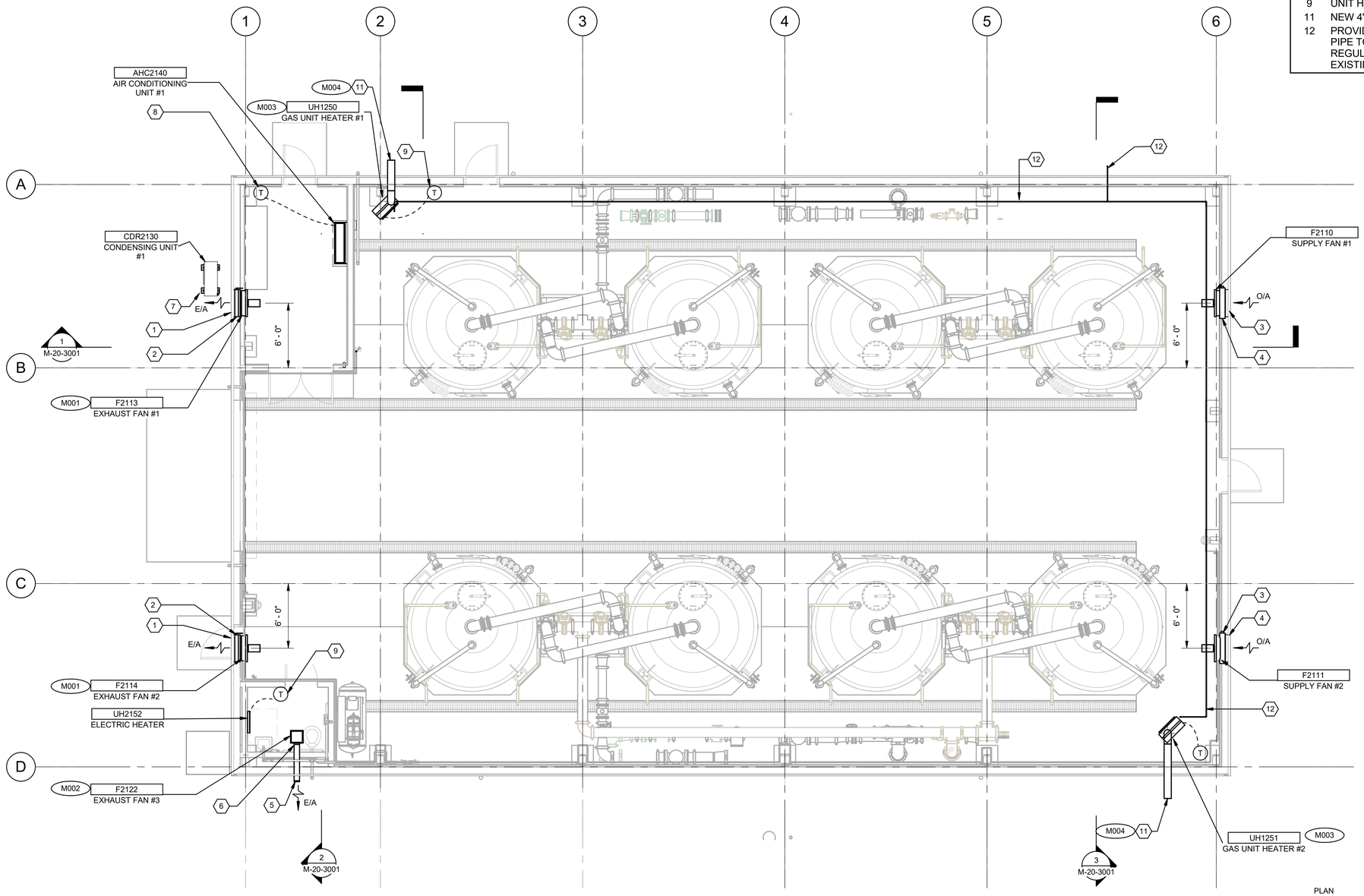
HVAC LEGENDS AND GENERAL NOTES

DRAWING NUMBER
M-20-0001
SHEET NUMBER
OF

Plot Date: 12/16/2020 9:05:18 PM Path: BIM 360://155452 - Sammamish Plateau PFAS Design/155452-M-20V19.rvt

KEYNOTES:

1	30"X30" EXHAUST AIR LOUVER (BY ARCHITECTURAL)
2	BACKDRAFT DAMPER
3	30"X30" INTAKE AIR LOUVER (BY ARCHITECTURAL)
4	MOTORIZED DAMPER.
5	6"X6" WALL CAP FOR BATHROOM EXHAUST
6	FLEXIBLE CONNECTION TO 6" EXHAUST DUCT
7	EQUIPMENT SUPPORT SLEEPER
8	AIR CONDITIONING UNIT'S THERMOSTAT SET @ 75F
9	UNIT HEATER'S THERMOSTAT SET @ 55F
11	NEW 4" VENT
12	PROVIDE NEW GAS METER/REGULATOR AT 1" PIPE TO BUILDING AND ADDITIONAL GAS REGULATOR AT UNITS. SIZE REGULATOR FOR EXISTING GAS PRESSURE.



FINISHED FLOOR

SCALE: 3/16" = 1'-0"

Brown AND Caldwell

90% DESIGN

Sammamish Plateau Water

Sammamish Plateau Water PFAS Project

REVISIONS

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CHECKED:
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FILE NAME

BC PROJECT NUMBER 155452

CLIENT PROJECT NUMBER XX

HVAC

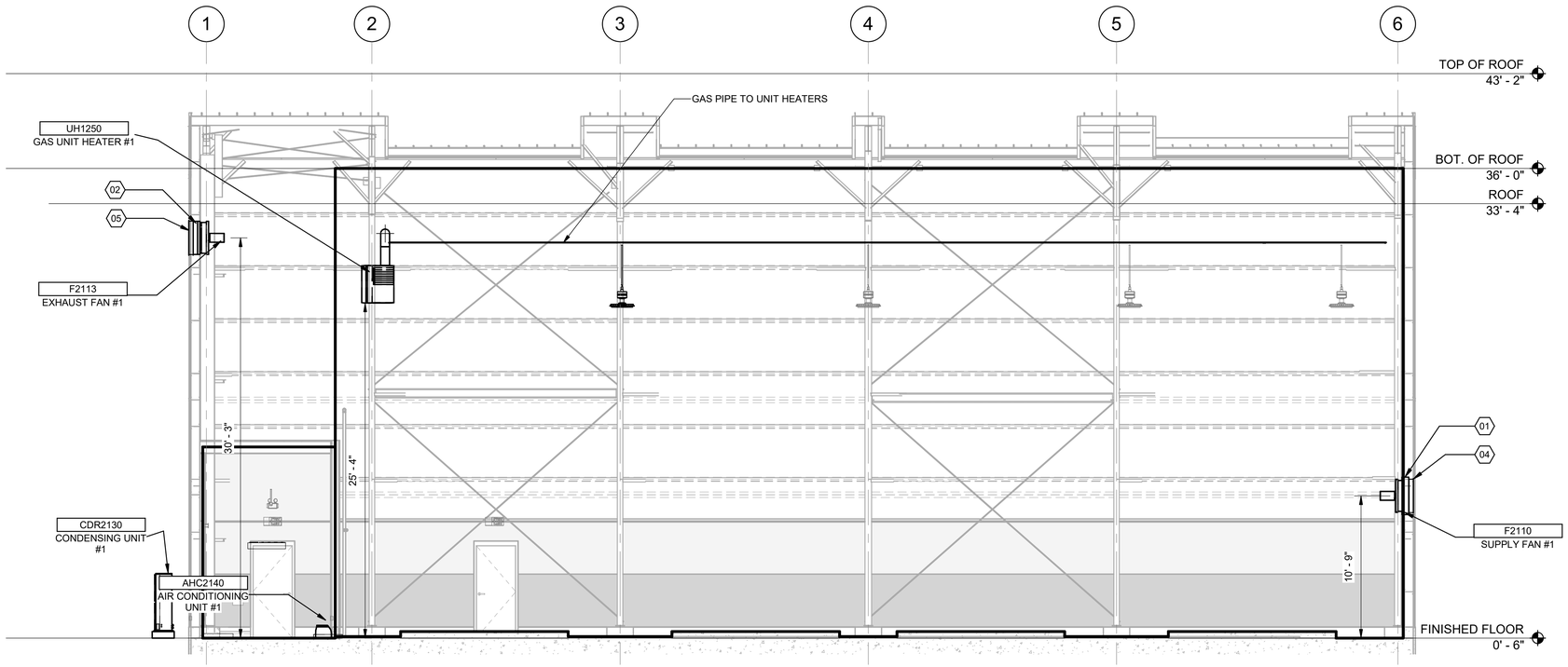
GAC BUILDING HVAC FLOOR PLAN

DRAWING NUMBER

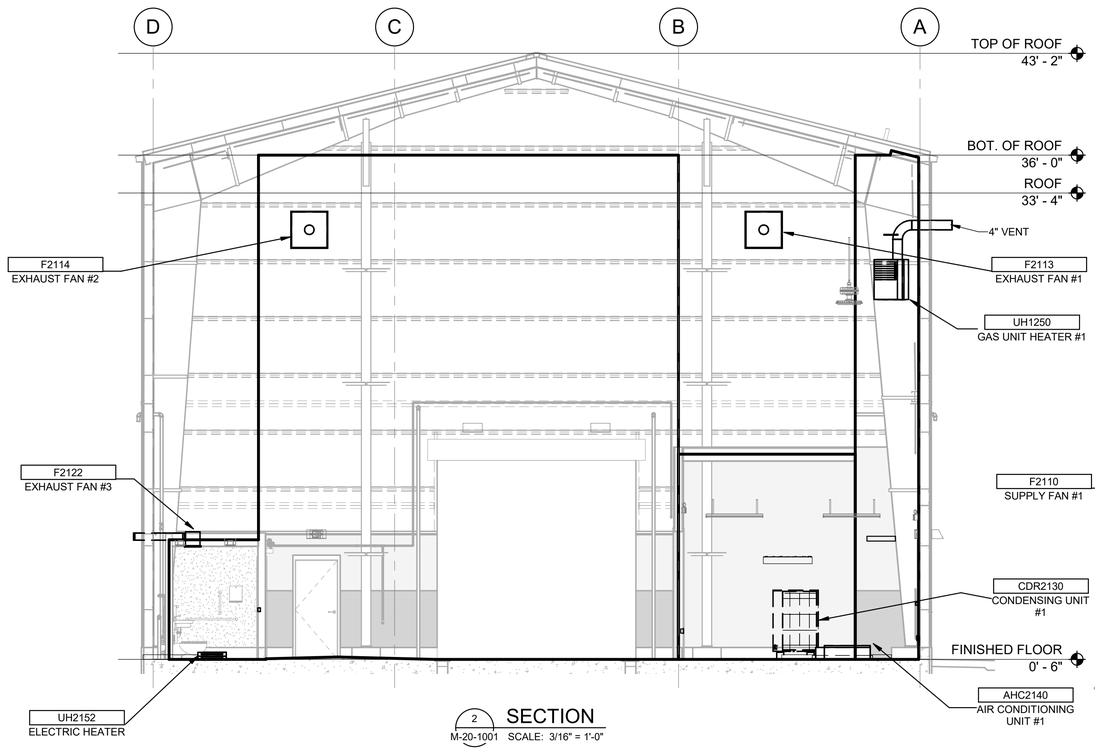
M-20-1001

SHEET NUMBER OF

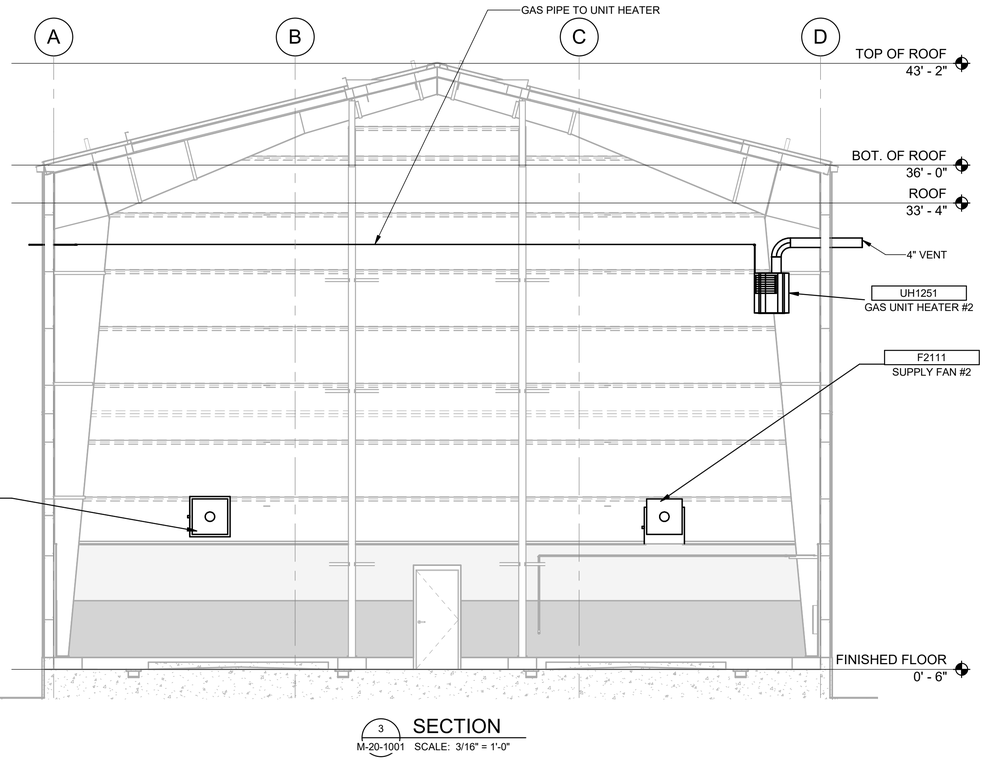
Plot Date: 12/16/2020 9:04:52 PM Path: BIM 360://155452 - Sammamish Plateau PFAS Design/155452-M-20V19.rvt



1 SECTION
M-20-1001 SCALE: 3/16" = 1'-0"



2 SECTION
M-20-1001 SCALE: 3/16" = 1'-0"



3 SECTION
M-20-1001 SCALE: 3/16" = 1'-0"

Brown AND Caldwell

90% DESIGN

Sammamish Plateau Water

Sammamish Plateau Water PFAS Project

REVISIONS

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CHECKED:
APPROVED: T.GATLIN
FILE NAME

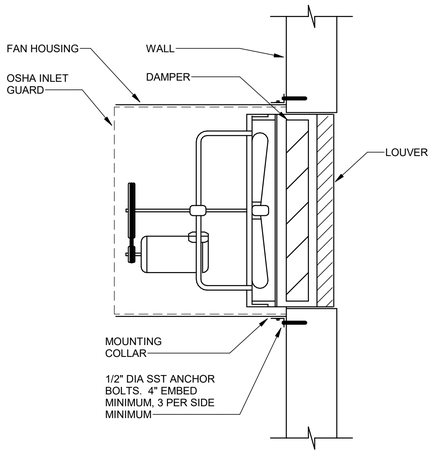
BC PROJECT NUMBER
155452
CLIENT PROJECT NUMBER
XX

HVAC

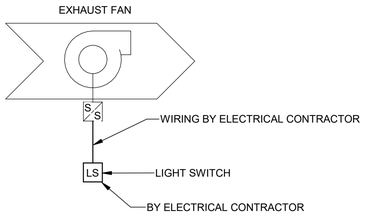
HVAC SECTIONS

DRAWING NUMBER
M-20-3001
SHEET NUMBER
OF

Plot Date: 12/16/2020 9:04:54 PM Path: BIM 360://155452 - Sammamish Plateau PFAS Design/155452-M-20V19.rvt



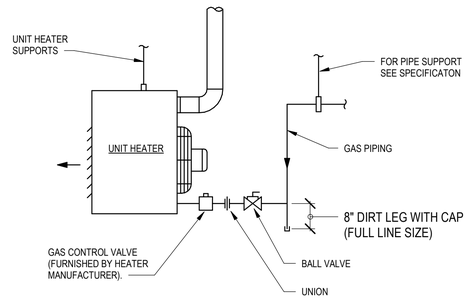
M001 PROPELLER WALL FAN
N.T.S.



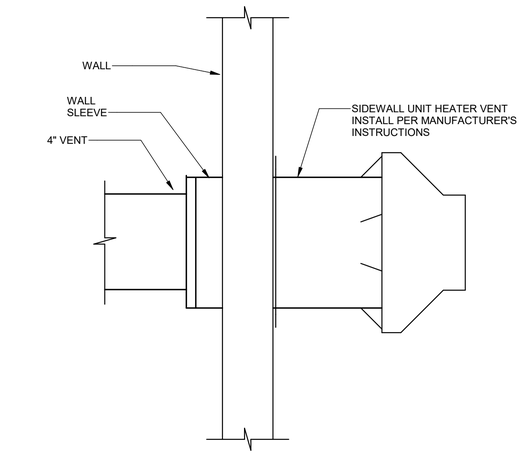
SEQUENCE OF OPERATION

UNDER NORMAL OPERATING CONDITIONS, THE EXHAUST FAN SHALL BE ENABLED BY INTERLOCKED LIGHT SWITCH AND RUN AT SCHEDULED SPEED TO PROVIDE REQUIRED AIRFLOW FOR VENTILATION. MAKE-UP AIR PROVIDED THRU DOOR UNDERCUT.

M002 TOILET EXHAUST FAN
N.T.S.



M003 GAS FIRED UNIT HEATER
N.T.S.



M004 SIDEWALL VENT DETAIL
N.T.S.

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Sammamish Plateau Water

Sammamish Plateau Water PFAS Project

REVISIONS

REV	DATE	DESCRIPTION

LINE IS 2 INCHES AT FULL SIZE

DESIGNED: K.RICE
DRAWN: K.RICE
CHECKED: D.STEWART
CHECKED:
APPROVED: T.GATLIN

FILE NAME

BC PROJECT NUMBER
155452

CLIENT PROJECT NUMBER
XX

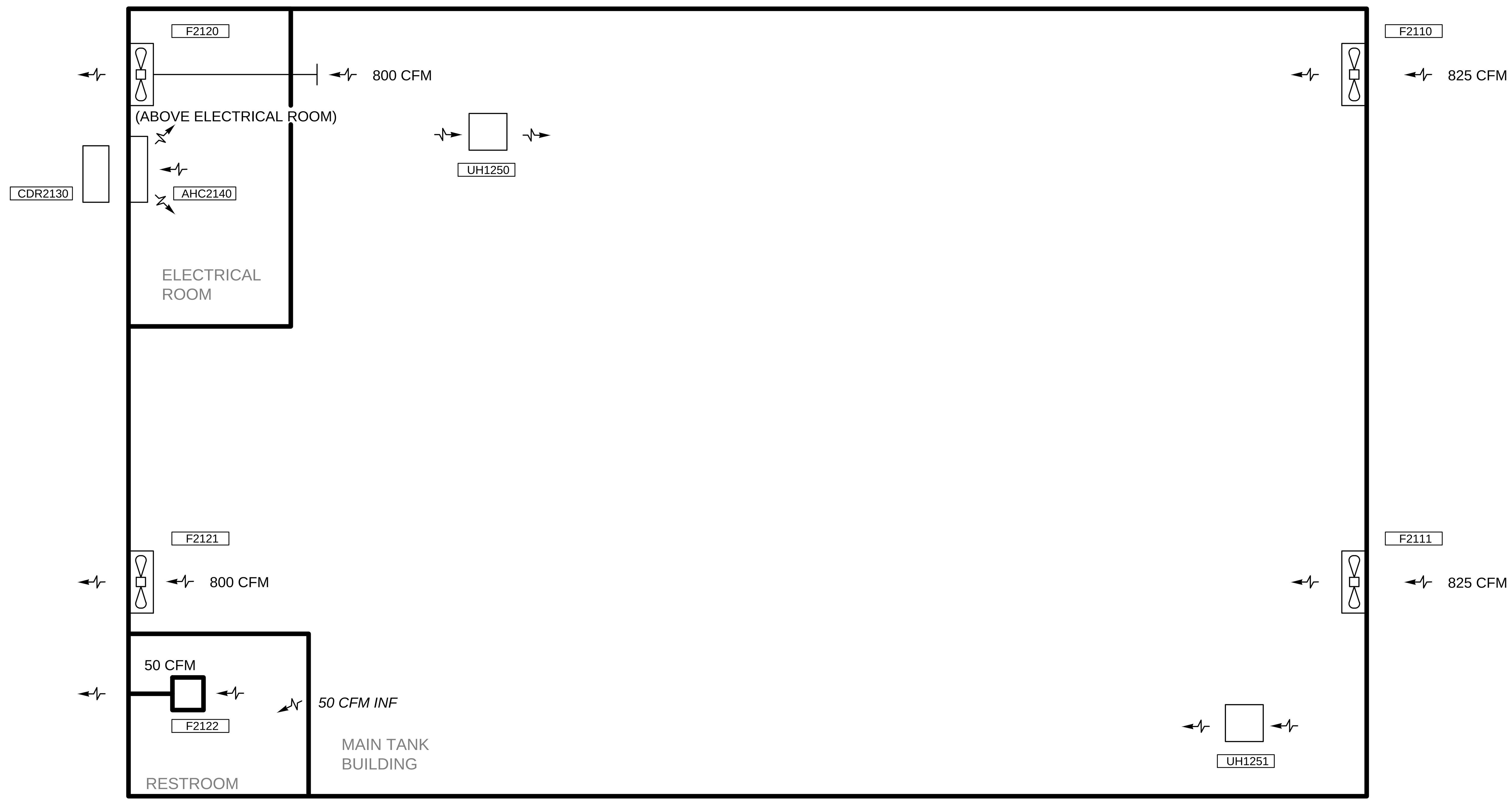
HVAC

HVAC DETAILS

DRAWING NUMBER
M-20-3002

SHEET NUMBER
OF

Plot Date: 12/16/2020 9:04:54 PM Path: BIM 360://155452 - Sammamish Plateau PFAS Design/155452-M-20V19.rvt



AIRFLOW DIAGRAM
SCALE: NTS

90% DESIGN

Sammamish Plateau Water

Sammamish Plateau Water PFAS Project

REVISIONS

REV	DATE	DESCRIPTION

LINE IS 2 INCHES AT FULL SIZE

DESIGNED: K.RICE
DRAWN: K.RICE
CHECKED: D.STEWART
CHECKED:
APPROVED: T.GATLIN

FILENAME
M-20-5001.dwg

BC PROJECT NUMBER
155452

CLIENT PROJECT NUMBER

HVAC

AIRFLOW DIAGRAM

DRAWING NUMBER
M-20-5001

SHEET NUMBER
OF

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SPW Logo_Square_RGB No TM (2).jpg
Wagner Archs.jpg

FAN SCHEDULE

ID	BASIS OF DESIGN	LOCATION	AREA SERVED	TYPE	AIR			ELECTRICAL			PHYSICAL		NOTES
					AIRFLOW (CFM)	TEMP. DB (°F)	STATIC PRESSURE DROP (IN H2O)	MOTOR SIZE (HP)	BRAKE HP	VOLT/PH	LxWxH (IN)	WEIGHT (LBS)	
F2110	SS2-16-423-VG	TANK ROOM	TANK ROOM	WALL MOUNTED	825	86	0.75	0.75	0.46	460/3			
F2111	SS2-16-423-VG	TANK ROOM	TANK ROOM	WALL MOUNTED	825	86	0.75	0.75	0.46	460/3			
F2120	SE1-14-436-VG	TANK ROOM	TANK ROOM	WALL MOUNTED	800	86	0.25	0.5	0.11	115/1			
F2121	SE1-14-436-VG	TANK ROOM	TANK ROOM	WALL MOUNTED	800	86	0.25	0.5	0.11	115/1			

DUCTLESS SPLIT

ID	BASIS OF DESIGN MANUFACTURER	CAPACITY		CONDENSER								FAN COIL					NOTES
		TOTAL COOLING (MBH)	SENSIBLE COOLING (MBH)	BOD MODEL NUMBER	LOCATION	TYPE	VOLT/PH	MCA	MOP	SEER	WEIGHT	LxWxH	BOD MODEL NUMBER	LOCATION	TYPE	WEIGHT	LxWxH	
CDR2130 AHC2140	MITSUBISHI	36	25	PUY-A36NKA7	OUTDOOR	WALL-HUNG	208/1	26	31	18.8	250	41x14x53	PKA-A36KA7	ELECTRICAL ROOM	WALL MOUNTED	60	46x12x14	

ELECTRIC UNIT HEATER / CABINET HEATER SCHEDULE

UNIT NO.	BASIS OF DESIGN	AREA SERVED	HEATER ELECTRICAL DATA				NOTES
			KW	AMPS	STEPS	VOLT/ PH	
UH2154	DAYTON 52K68	TANK ROOM W	1.5	12.6	1	115/1	

GAS FIRED UNIT HEATER SCHEDULE

UNIT NO.	AREA SERVED	BASIS OF DESIGN	CFM	TEMP. DIFF. (DEG. F)	FAN ELECTRICAL DATA				GAS HEATING				MTG. HT (FT)	THROW (FT)	THROW DIRECTION	BASIS OF DESIGN	NOTES
					HP	VOLT	PH	HZ	INPUT (BTUH)	OUTPUT (BTUH)	EFFICIENCY	GAS TYPE					
UH2150	TANK ROOM WEST	MODINE HD30	505	44	1/15	460	3	60	30,000	24,600	82%	NAT	13	25	HORIZ	MODINE HD30	1,2,3,4
UH2151	TANK ROOM EAST	MODINE HD30	505	44	1/15	460	3	60	30,000	24,600	82%	NAT	13	25	HORIZ	MODINE HD30	1,2,3,4

NOTES:

1. PROVIDE BUILT IN STAGED THERMOSTAT, MAGNETIC CONTACTOR, SUB CIRCUIT FUSING, FAN DELAY ON SHUT DOWN, HEATING DELAY ON START UP, CONTROL TRANSFORMER, DISCONNECT SWITCH, MOUNTING BRACKETS AND THERMAL CUTOUT SWITCH FOR EACH ELEMENT.
2. 3-WIRE POWER FEED.
3. CEILING HUNG
4. 460/3 POWER FEED WITH INTEGRAL TRANSFORMER

Brown AND Caldwell

90% DESIGN

Sammamish Plateau Water

Sammamish Plateau Water PFAS Project

REVISIONS

REV	DATE	DESCRIPTION

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CHECKED: D.STEWART
CHECKED:
APPROVED: T.GATLIN

FILENAME
M-20-7001.dwg

BC PROJECT NUMBER
155452

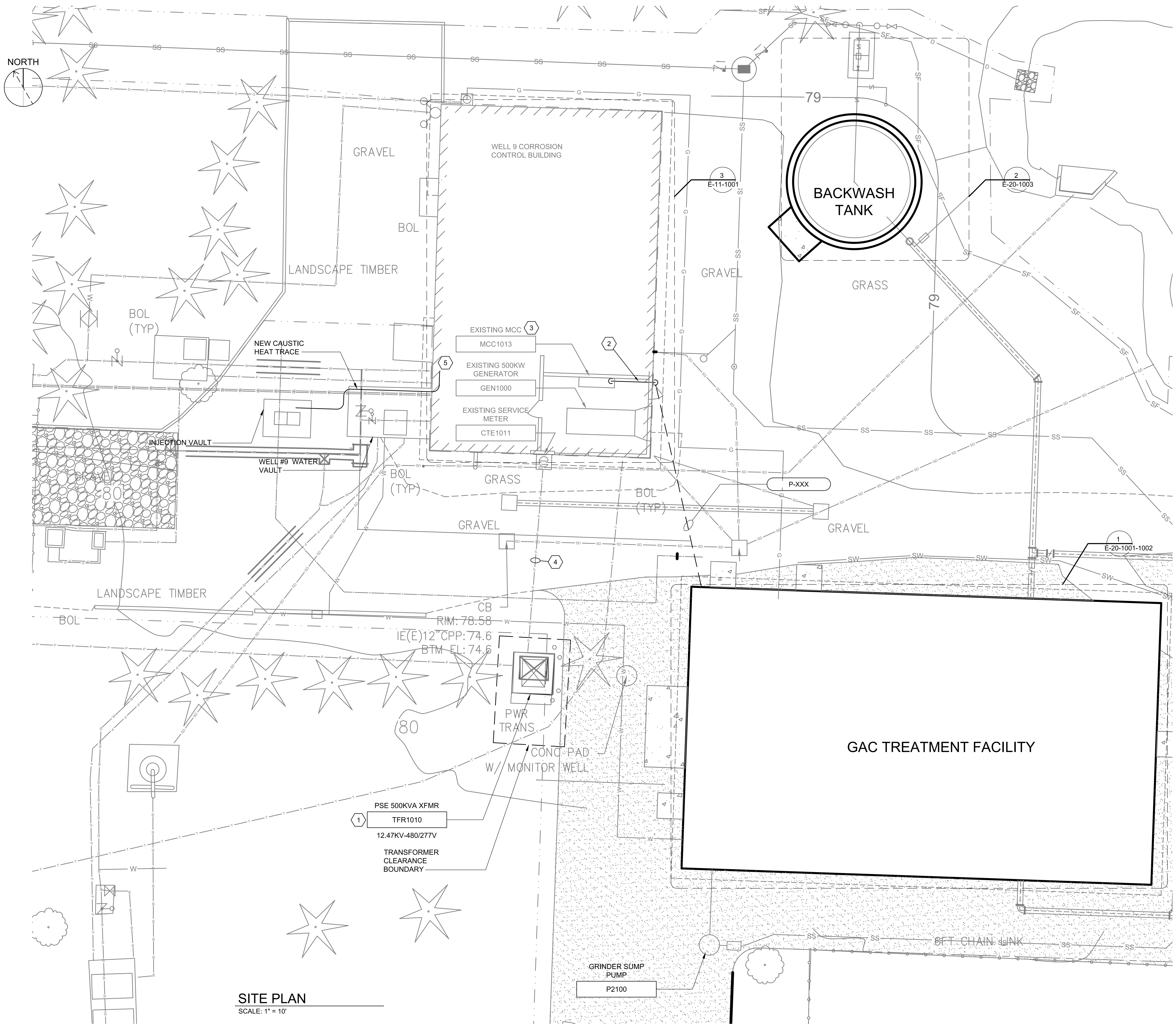
CLIENT PROJECT NUMBER

HVAC

MECHANICAL SCHEDULES

DRAWING NUMBER
M-20-7001

SHEET NUMBER
OF



SITE PLAN

SCALE: 1" = 10'

GENERAL NOTES:

1. ALL PROJECT ELECTRICAL EQUIPMENT INSTALLATION SHALL BE COORDINATED WITH WORK SEQUENCE SPECIFICATION 01 12 16, PLAN VIEW DRAWINGS, AND ONE-LINE DIAGRAMS.
2. LOCATION SHOWN FOR EXISTING EQUIPMENT IN WELL #9 BUILDING IS APPROXIMATE. CONTRACTOR TO FIELD VERIFY EXACT LOCATION.

KEY NOTES:

1 COORDINATE WITH PROJECT REPRESENTATIVE AND PUGET SOUND ENERGY (PSE) FOR ENGINEER BRENDAN BAUGHN AT 425-748-6318 FOR OUTAGE RELATED TO REPLACEMENT OF PSE UTILITY SERVICE TRANSFORMER.

2 FEEDER BUCKET TO NEW GAC BUILDING LOCATED HERE. SEE PHOTO ON DRAWING E-10-7001 FOR DETAILS. CONTRACTOR TO FIELD VERIFY EXISTING CONDITIONS AND ACCOUNT FOR ELECTRICAL, BUILDING MECHANICAL, AND STRUCTURAL FEATURES PRIOR TO WORK IN THE AREA.

3 CONTRACTOR TO EXIT TOP OF MCC WITH GAC FEEDER CONDUIT TO CEILING AND OUT BUILDING WALL. USING MOGUL LB TYPE FITTING, TRANSITION DOWN WALL AND UNDERGROUND TO GAC FACILITY. SEE CABLE SCHEDULE FOR CONDUIT/CABLE SIZING.

4 PRESERVE EXISTING SERVICE ENTRANCE CONDUITS DURING CONSTRUCTION.

5 CAUSTIC PIPE HEAT TRACE CONTINUED ON DRAWING E-11-1001.

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Sammamish Plateau Water

Sammamish Plateau Water PFAS Project

REVISIONS

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LINE IS 2 INCHES AT FULL SIZE

DESIGNED: T.HALL
DRAWN: J.MILLER
CHECKED:
CHECKED:
APPROVED:

FILENAME
E-00-1001.dwg
BC PROJECT NUMBER
155452
CLIENT PROJECT NUMBER

ELECTRICAL

SITE PLAN

DRAWING NUMBER
E-00-1001
SHEET NUMBER
OF

PANEL SCHEDULE — PNL L

240 / 120 VOLTS	NORMAL POWER	BUS RATING:	150 AMPS	LOCATION:	WELL 9 BUILDING (1)	FEED-THRU LUGS	NO
1 -PHASE	PNL. MFR.:	MAIN BKR:	150 AMPS	MOUNTING:	WALL	DOUBLE LUGS	NO
3 -WIRE	CAT. NO.:	A.I.C. RATING:	10,000 AIC SYM	FED FROM:	WELL 9 MCC	ISOLATED GND	NO
	REF. DWG.:			CONDUCTORS:		100% NEUTRAL	NO

CKT NO.	CIRCUIT DESCRIPTION	CODE	LOAD (kVA)	BKR AMPS	PH	BKR AMPS	LOAD (kVA)	CODE	CIRCUIT DESCRIPTION	CKT NO.
1	MCP POWER			20/1	-A-	20/1			LIGHTS SECONDARY CONTAINMENT	2
3	REC LAB NORTH WALL			20/1	-B-	20/1			LIGHTS SECONDARY CONTAINMENT	4
5	REC ELEC ROOM			20/1	-A-	20/1			RECEPT PUMP ROOM HEATER (4 EA)	6
7	LIGHTS PUMP ROOM			20/1	-B-	20/1			RECEPT PUMP ROOM HEATER (4 EA)	8
9	REC PUMP ROOM, EF-1			20/1	-A-	20/1			MANHOLE POWER	10
11	LIGHTS ELECT ROOM			20/1	-B-	20/1			RECEPT N. WALL PUMP ROOM	12
13	EXT. LIGHTING REAR			20/1	-A-	20/1			SPARE	14
15	REGIONAL VAULT SUMP			20/1	-B-	20/1			EXTERIOR LIGHT FRONT	16
17	REG VAULT LIGHT/PLUG			20/1	-A-	20/1			DM-6 EF-2 METER PST LIGHTS	18
19	**CAUSTIC SODA HEAT TAPE (NOTE 1)**	**Z**	**1.20**	20/1	-B-	20/1			EF-3	20
21	**CAUSTIC SODA HEAT TAPE (NOTE 1)**	**Z**	**1.20**	20/1	-A-	20/1			FLUORIDE PACKAGE	22
23	CL2 INJECTION PUMPS			20/1	-B-	20/1			EF-3, SOUTH WALL LAB RECEPT	24
25	**CAUSTIC SODA CONTROL PANEL CP1110**	**Z**	**0.50**	**20/1**	-A-	20/1			GENERATOR INTAKE/EXHAUST LOUVERS	26
27	RECTIFIER			30/1	-B-	20/1			ANNUNCIATOR MCP	28
29	SIC - 212, NaOH REC			20/1	-A-	20/1			LIGHTS LAB	30
31	SIC - 211, NaOH REC			20/1	-B-	20/1			SPARE	32
33	**CAUSTIC SODA CONTROL PANEL CP1120**	**Z**	**0.50**	**20/1**	-A-	30/1			HEAT LAB RHB 123456	34
35	CONTROL PANEL			20/1	-B-				HEAT LAB RHB 123456	36

CODES:		CONNECTED LOAD		CALCULATED DEMAND LOAD		
H	= HVAC LOADS	0.00	kVA	0.00	kVA	(100%)
K	= KITCHEN EQUIPMENT	0.00	kVA	0.00	kVA	(100%)
L	= LIGHTING LOADS	0.00	kVA	0.00	kVA	(125%)
LM	= LARGEST SINGLE MOTOR	0.00	kVA	0.00	kVA	(125%)
M	= OTHER MOTOR LOADS	0.00	kVA	0.00	kVA	(100%)
NC	= NON-COINCIDENTAL LOADS	0.00	kVA	0.00	kVA	(0%)
R	= GENERAL USE RECEPTACLES	0.00	kVA	0.00	kVA	(50%>10kVA)
S	= DEDICATED RECEPTACLES	0.00	kVA	0.00	kVA	(100%)
Z	= MISC. OR APPLIANCES	2.40	kVA	2.40	kVA	(100%)
	TOTALS:	2.40	kVA	2.40	kVA	
		10	AMPS	10	AMPS	

REMARKS:

1 **PROVIDE GFEP TYPE BREAKER WITH 30mA TRIP SETTINGS ON HEAT TRACE CIRCUITS.**

PHASE BALANCE

PHASE A	10.00	AMPS
PHASE B	10.00	AMPS

Sammamish Plateau Well 9 PFAS

MAXIMUM DEMAND CURRENT READING OVER 30 DAYS				265.9	A @ 480V
(PER NEC 220.87, MAXIMUM DEMAND * 125%)				332.4	A
PROJECT ADDED LOADS:					
SEE ONELINE AND PANEL SCHEDULE FOR DETAILS	43.80	A @ 480V	=	43.80	A @ 480V
Total added load: (See MCC2013 oneline and elevation for details)			=	43.80	A @ 480V
Total added load + 125%:				54.75	A
PROJECT TOTAL DEMAND LOAD					
332.375	+	54.75	=	387.13	A @ 480V

A / E-00-1001 GAC FEEDER BUCKET
SCALE: NO SCALE

GENERAL NOTES:

1. EXISTING CIRCUIT INFORMATION WAS DERIVED FROM OWNER PROVIDED RECORD DOCUMENTATION. VERIFY CIRCUIT INFORMATION PRIOR TO DEMOLITION AND CONSTRUCTION.
2. CONTRACTOR TO UPDATE PANEL SCHEDULES WITH NEW CIRCUIT INFORMATION.
3. ALL BOLD ITEMS SHOWN ON THIS SHEET ARE NEW FOR THIS CONTRACT.

KEY NOTES:

1 EXISTING PANEL LOCATED IN IN LAB ROOM.

Brown AND Caldwell

90% DESIGN

Sammamish Plateau Water

Sammamish Plateau Water PFAS Project

REVISIONS

REV	DATE	DESCRIPTION

LINE IS 2 INCHES AT FULL SIZE

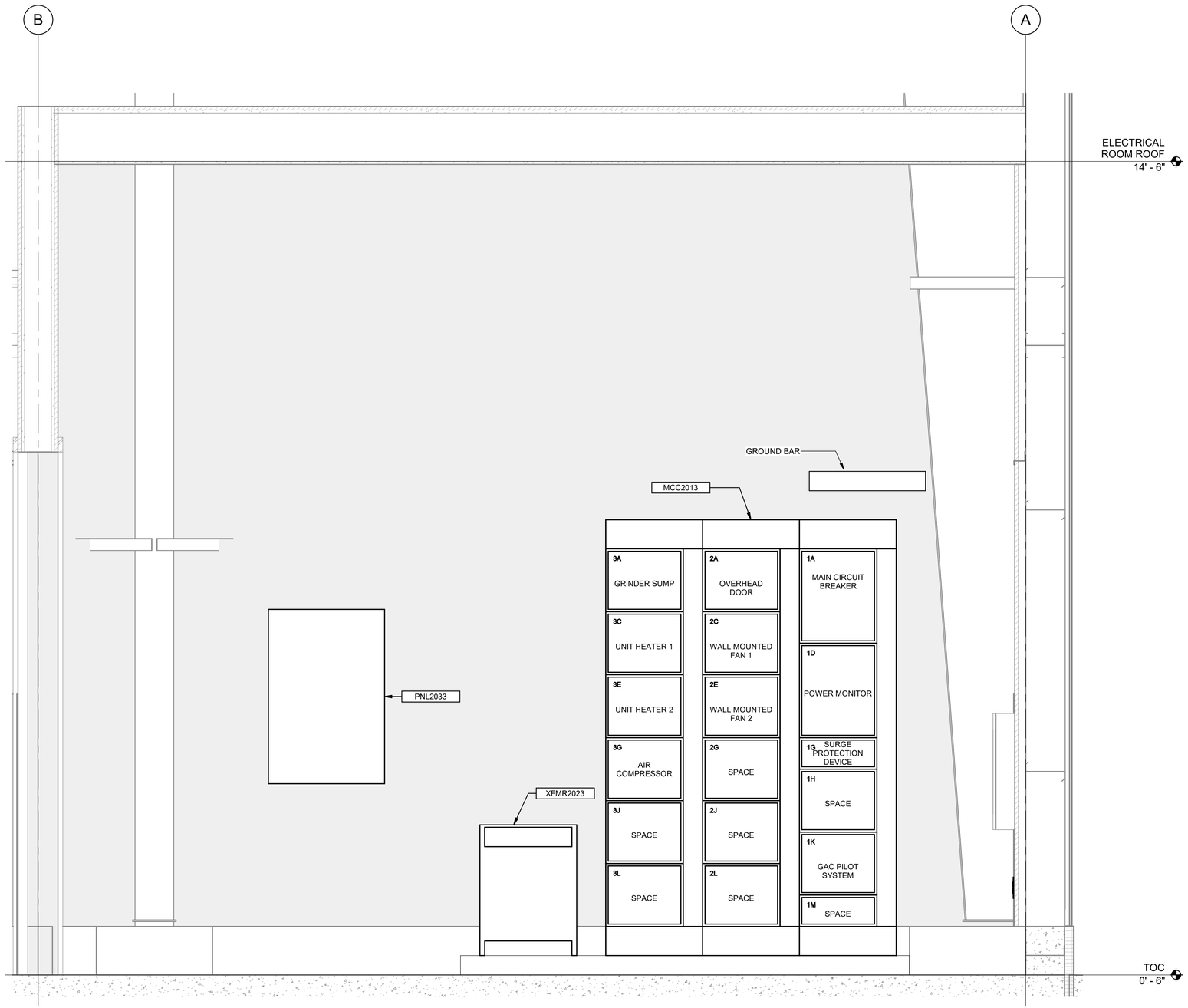
DESIGNED: T.HALL
DRAWN: J.MILLER
CHECKED:
CHECKED:
APPROVED:
FILENAME E-10-7001.dwg
BC PROJECT NUMBER 155452
CLIENT PROJECT NUMBER

ELECTRICAL

WELL 9 BUILDING LOADS AND SCHEDULE

DRAWING NUMBER E-10-7001

SHEET NUMBER
OF



1 ELEVATION
E-20-1001 SCALE: 1" = 1'-0"

MCC SECTION LOCATION	EQUIPMENT NUMBER	EQUIPMENT NAME
1A	CB20XX	MAIN CIRCUIT BREAKER
1D	PM2013A	POWER MONITOR
1G	SPD2013B	SURGE PROTECTION DEVICE
1H		SPACE
1K	PLT2000	GAC PILOT SYSTEM
1M		SPACE
2A	M2099	OVERHEAD DOOR
2C	F2110	WALL MOUNTED FAN 1
2E	F2111	WALL MOUNTED FAN 2
2G		SPACE
2J		SPACE
2L		SPACE
3A	P2100	GRINDER SUMP
3C	UH2150	UNIT HEATER 1
3E	UH2151	UNIT HEATER 2
3G	CPR2500	AIR COMPRESSOR
3J		SPACE
3L		SPACE

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Sammamish Plateau Water

Sammamish Plateau Water
PFAS Design

REVISIONS

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APPROVED:

FILE NAME

BC PROJECT NUMBER
155452
CLIENT PROJECT NUMBER

ELECTRICAL

MCC AND ELECTRICAL EQUIPMENT ELEVATIONS 3

DRAWING NUMBER
E-20-4003

SHEET NUMBER
OF

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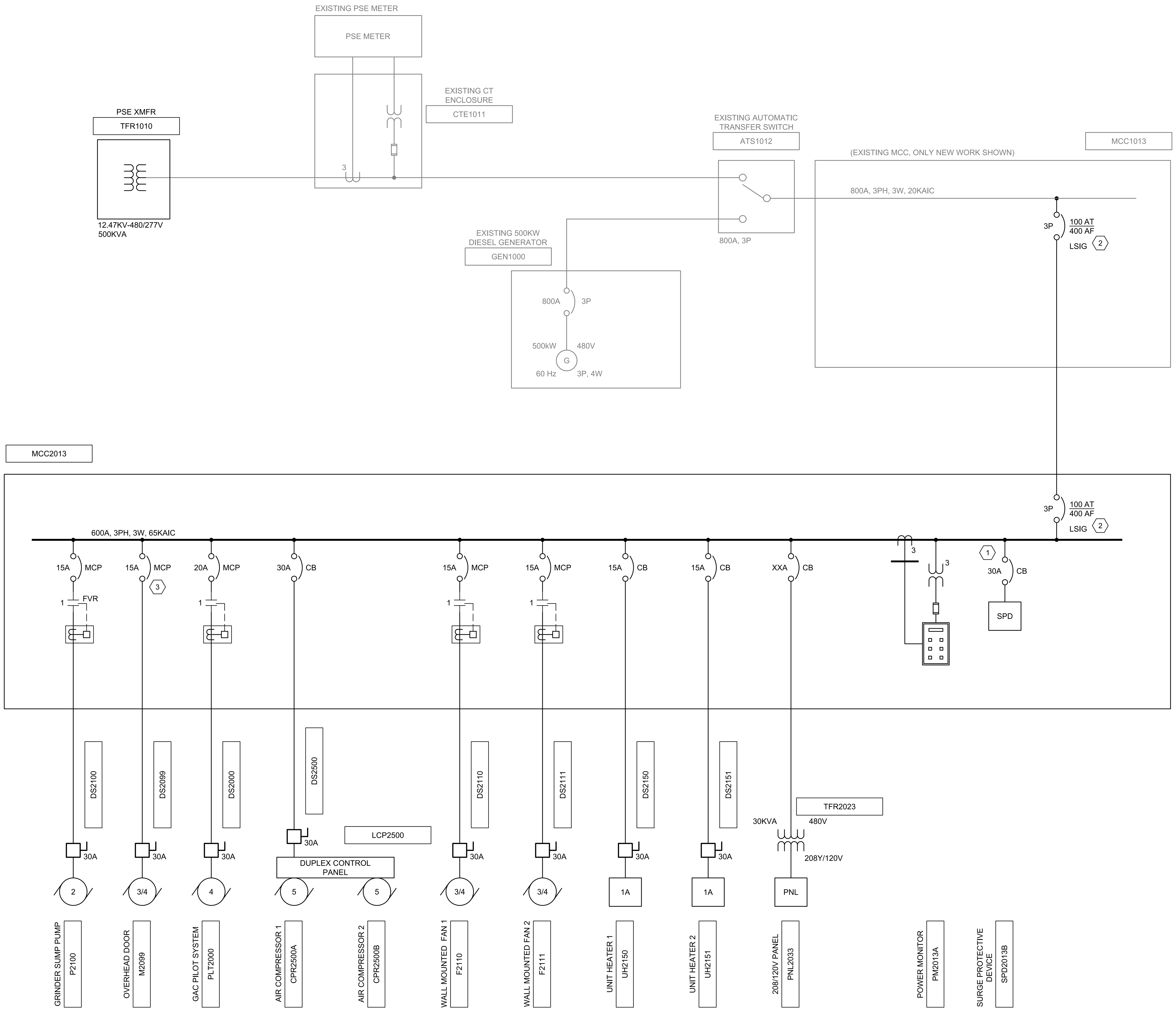

GENERAL NOTES:

1. -

KEY NOTES:

1. PROVIDE CIRCUIT BREAKER AS REQUIRED BY SPD MANUFACTURER.
2. PROVIDE AN ARC FAULT REDUCTION MAINTENANCE SWITCH (ARMS) ON BREAKER.
3. CONTACTOR AND CONTROLLER FOR DOOR OPERATOR PROVIDED AS PART OF A PACKAGED SYSTEM.

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90% DESIGN

Sammamish Plateau Water

Sammamish Plateau Water PFAS Project

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FILENAME
E-20-5001.dwg

BC PROJECT NUMBER
155452

CLIENT PROJECT NUMBER

ELECTRICAL

GAC BUILDING ONE-LINE DIAGRAM

DRAWING NUMBER
E-20-5001

SHEET NUMBER
OF

PANEL SCHEDULE PNL2033

208Y/120 VOLTS	NORMAL POWER	BUS RATING:	100 AMPS	LOCATION:	GAC BUILDING	FEED-THRU LUGS	N
3 -PHASE	PNL. MFR.: xx	MAIN BKR:	100 AMPS CB	MOUNTING:	WALL	DOUBLE LUGS	N
4 -WIRE	CAT. NO.: xx	A.I.C. RATING:	18,000 AIC SYM	FED FROM:	TOP	ISOLATED GND	N
	REF. DWG.: xx			CONDUCTORS:	xx	200% NEUTRAL	Y

CKT NO.	CIRCUIT DESCRIPTION	CODE	LOAD (kVA)	BKR AMPS	PH	BKR AMPS	LOAD (kVA)	CODE	CIRCUIT DESCRIPTION	CKT NO.
1	SPD			30	-A-	20	0.90	R	RECEPTACLES - INTERIOR NORTH	2
3	-			-	-B-	20	0.72	R	RECEPTACLES - INTERIOR SOUTH	4
5	-			-	-C-	20	0.36	R	RECEPTACLES - EXTERIOR	6
7	RESTROOM LIGHTS/RECEPTACLE	L	0.23	20	-A-	20	0.18	R	RECEPTACLE - BACKWASH TANK	8
9	H2160 - INSTA-HOT WATER HEATER	LM	1.44	20	-B-	20	1.00	H	BATHROOM WALL HEATER	10
11	SPARE			20	-C-	30	2.45	H	AHC2140	12
13	SPARE			20	-A-		2.45	H	-	14
15	SPARE			20	-B-	20			SPARE	16
17	PLC CABINET	Z	0.50	20	-C-	20	0.36	R	RECEPTACLES - ELECTRICAL ROOM	18
19	GRINDER PUMP CONTROL PANEL	Z	1.00	15	-A-	20	0.54	R	RECEPTACLES - ELECTRICAL ROOM	20
21	AIR DRYER	Z	0.72	20	-B-	20	0.18	S	RECEPTACLES - AIR COMPRESSOR	22
23	LIGHTING - INTERIOR	L	1.38	20	-C-	20	1.20	H	F2120 - WALL MOUNTED FAN 3	24
25	LIGHTING - INTERIOR	L	0.92	20	-A-	20	1.20	H	F2121 - WALL MOUNTED FAN 4	26
27	LIGHTING - EGRESS	L	0.10	20	-B-	20			SPARE	28
29	LIGHTING - EXTERIOR	L	0.15	20	-C-	20	0.08	L	LIGHTING - ELECTRICAL ROOM	30
31	SPARE			20	-A-	20			SPARE	32
33	SPARE			20	-B-	20	0.20	Z	HEAT TRACE - BACKWASH TANK	34
35	SPARE			20	-C-	20			SPARE	36
37	SPARE			20	-A-	20			SPARE	38
39	SPARE			20	-B-	20			SPARE	40
41	SPARE			20	-C-	20			SPARE	42

CODES:	CONNECTED LOAD		CALCULATED DEMAND LOAD		
H = HVAC LOADS	8.30	kVA	8.30	kVA	(100%)
K = KITCHEN EQUIPMENT	0.00	kVA	0.00	kVA	(100%)
L = LIGHTING LOADS	2.86	kVA	3.57	kVA	(125%)
LM = LARGEST SINGLE MOTOR	1.44	kVA	1.80	kVA	(125%)
M = OTHER MOTOR LOADS	0.00	kVA	0.00	kVA	(100%)
NC = NON-COINCIDENTAL LOADS	0.00	kVA	0.00	kVA	(0%)
R = GENERAL USE RECEPTACLES	2.88	kVA	2.88	kVA	(50%>10kVA)
S = DEDICATED RECEPTACLES	0.18	kVA	0.18	kVA	(100%)
Z = MISC. OR APPLIANCES	2.42	kVA	2.42	kVA	(100%)
TOTALS:	18.08	kVA	19.15	kVA	

REMARKS:

1.

PHASE BALANCE ONLY

PHASE A	60	AMPS
PHASE B	36	AMPS
PHASE C	54	AMPS

Brown AND Caldwell

90% DESIGN

Sammamish Plateau Water

Sammamish Plateau Water PFAS Project

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ELECTRICAL

GAC BUILDING PANEL SCHEDULES

DRAWING NUMBER
E-20-7001

SHEET NUMBER
OF